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ABSTRACT

Presented is a report of a project to provide occupational counseling to over 60 physically handicapped high school students. Noted are project goals involving direct and indirect provision of services to the students, the training of counselors through a 1-year internship, and the development of a model for a counseling specialty within the special education framework. Sections are given on the introduction and background of the project, application of the counseling program in the schools, the role model, and a half-day conference held at the end of the year. A major section provides descriptive and comparative student data including characteristics of the student population results of evaluations of students' career maturity and career plans, their ratings of life space, and teacher ratings of students. Noted among conclusions are career maturity characteristics of physically disabled high school students, attitude changes in counseling interns, and transferability of counseling skills to other kinds of handicapped clients. It is concluded that the training model and the service model were both validated by the year's experience. Appended are a listing of materials disseminated by the project, sample newsletters, and a student information form. (DB)

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OCCUPATIONAL COUNSELING FOR PHYSICALLY HANDICAPPED STUDENTS: A DEMONSTRATION AND TRAINING PROJECT

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FOREWORD

Mainstreaming has brought numbers of physically handicapped students into regular high school classes. It has not, however, provided these students with the special assistance they need to make career plans that will utilize their potentialities fully and realistically and that will enable them to achieve a maximum of independence in their lives. Few high schools provide even minimal career counseling services for their total student populations, and it is therefore not to be expected that schools will provide handicapped students with the even more intensive help they need to deal with and overcome the many internal and external barriers which stand between them and full development of their capacities.

The Occupational Counseling for Physically Handicapped High School Students project set out to meet this need--to provide these students with information, awareness of decision-making strategies, understanding and acceptance of their strengths and interests, and a sense of increased confidence in their ability to plan and implement satisfying careers. The OCP project brought counseling interns into two large city high schools to work with students in special classes for physically handicapped. During the course of the year these interns introduced a number of direct service activities calculated to promote the career development of the students: individual counseling, group counseling, guest speakers about careers, and field trips to places of employment. The interns also worked indirectly, through important persons in the life of the student. Toward this end they issued a newsletter for parents and developed consultant relationships with teachers, speech and reading specialists, and physical therapists in the school, and with agencies outside the school that did or could provide service to the students.

Few counselors possess the combination of personal qualities and special competences needed to work effectively with this population. Therefore the OCP project provided intensive special training for a selected group of counseling interns and then provided continuing supervision, consultation, and seminars for the interns throughout the course of the year. Thus the project staff not only was furnishing career counseling for the handicapped students in two high schools but was also adding to the pool of counselors who have both the interest and qualifications to work with such students.

This report contains evidence that the project made a difference in the lives of these students. It also offers the beginning of a model for both the provision of counseling services to physically handicapped students in a mainstreamed high school and for the training of counselors to provide those services. Those interested will find in the report detailed descriptions of these many activities and explications of the lessons learned from this one year experience.

The CASE Institute for Research and Development in Occupational Education welcomes requests for further information and invites field visitations to the expanded demonstration that will be conducted in four high schools during the 1976-1977 academic year with the continued support of the New York State Education Department.

Lee Cohen, Ph.D.
Director, Institute for Research
and Development in Occupational
Education

ACKNOWLEDGEMENTS

The OCP Project was possible only because of the willingness of the New York City Board of Education to cooperate fully and to open their doors to the project staff. Most particularly, the project's implementation was greatly facilitated by the Bureau for the Education of the Physically Handicapped through its director, Marcus Arnold, and his associates who worked with us: Dina Ehrlich, Rita Brizel, Claire Fenig, Gladys Klotz, and Dennis White.

Unfortunately many of the people who contributed so much to the OCP project cannot be named specifically because of the request by the New York City Board of Education that the high schools remain unidentified. Throughout this report, therefore, we refer to them only as Service Schools A and B and Comparison Schools A and B. Among these schools are dozens of people without whose generous participation and involvement the project could not have been accomplished. These include the students themselves, their special education teachers, their regular classroom teachers, the two schools' principals and vice-principals, the reading and speech specialists from the Board of Education, and the nurses, physical therapists, and classroom aides who are employed by the Department of Health of the City of New York. All heavily burdened already, they nonetheless went out of their way to make it possible for our counseling interns to work in the schools as colleagues.

There were a total of seven counseling interns in this project during the course of the year, although no more than five were on the staff as field counselors at any one time. Those who served the entire year were: Doris Kemp, Mareleyn Schneider, and Alan Weisner. Scott Hatley and Sharon

Sapp left the project in midyear because of compelling career needs of their own and were replaced by Frances Dillon and Lynne Rosenthal. They took on difficult assignments and often had to extemporize in the field when they discovered that their training left them unprepared for specific needs and problems that occurred during the course of their days in the schools.

We are also grateful to a seventh counseling intern, Roslyn Fisher, who was the project's research assistant and resource specialist. She collected a wealth of informative materials for use by the counselors and others, she did much of the preliminary work leading up to the guest speakers and field trips, served as editor of the newsletters, and prepared sections of this final report.

Many members of the IRDOE staff provided continuing support during the year. Jack Schneps and David Katz were involved from the very beginning in designing the project and in giving us the benefit of their experiences and specialized knowledge regarding handicapped people and the schools and agencies that serve them. The bulk of the secretarial assistance, including preparation of the newsletters and this report, was provided by Olivia Schweitzer under the supervision first of Val Michielini and later by Sonja Ikenson.

Lee Cohen, Director of IRDOE, was a source of assistance and support in every aspect of this project and aided us immeasureably in finding our way through the many complex components of the project.

We are grateful for the opportunity provided by the support of the New York State Education Department to step out of the routine of academic life into the stimulating experience of innovation, demonstration, and evaluation in the daily life of the public schools of a large city.

Leo Goldman, Ph.D.
Project Director

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OCCUPATIONAL COUNSELING FOR PHYSICALLY HANDICAPPED HIGH SCHOOL STUDENTS: A DEMONSTRATION AND TRAINING PROJECT

I. Introduction and Background

A. Overview of the Project.

The project designated Occupational Counseling for Physically Handicapped High School Students (hereafter OCP or the Project) was designed to accomplish three major objectives. First, it was intended to innovate by demonstrating how career counseling services could be provided for a population of physically disabled high school students within the scope of a special education program in the school. Second, the Project was intended to innovate by utilizing an internship to prepare graduate students of counseling for service as counselors of physically disabled students within a special education high school program. Finally, the Project was intended to contribute toward the development of a generalizable model for providing career counseling and related educational and personal counseling and consultative service to teachers, parents, and others in the student's life. Each of these objectives is defined more fully in the following section.

To accomplish the objectives, five advanced graduate students of counseling, all candidates for the Master's degree, were selected as interns and given special orientation to disability, special education, and rehabilitation; the interns were then placed in two New York City high schools which contained classes of physically disabled students. During the course of the 1975-1976 school year these interns, working two days a week, gradually introduced a number of services and programs, including individual counseling, both formal and informal, and group counseling sessions. The interns also conducted field trips, brought in guest speakers,

produced a newsletter for parents, and engaged in a great deal of consultation with special education teachers and specialists in remedial reading, speech correction, physical therapy, nursing, and rehabilitation. A sixth intern served as resource coordinator for field trips, speakers, the newsletter, liaison with outside agencies, and the acquisition and dissemination of information and materials pertinent to the project.

The Project did indeed confirm the need for and the viability of this kind of service, but it also taught us over and over the importance of modifying and adapting our techniques and materials in order to meet the special needs and characteristics of this population. The year's experience also pointed up some of the important people and factors in the school, home, and community that must be understood and dealt with effectively if disabled students are to make optional use of their potentialities and eventually to make and implement suitable career plans.

The evaluation data from the two Service schools and the two Comparison schools (where no services were offered but pre- and post-data were collected) provided a wealth of demographic data and information about the abilities, attitudes, and career maturity of the students. These data highlighted especially the deficits in these areas suffered by many of these students, although it is not clear to what extent these deficits result from the disability itself, from inability to benefit fully from previous schooling, or from socio-economic or other factors. Perhaps most impressive of all is the wide range of functioning seen within this population; "physical disability" is indeed a meaningful designation but the meaning is different for different students. Therefore, careful assessment and individual planning is extremely important.

B. Need for the Project.

The call for educational reform to provide occupational counseling has become increasingly vociferous from numerous segments of the United States population.[1] These include students, youth not attending schools, parents, business and industry, labor, minorities, the handicapped, and the disadvantaged. While important for all age groups, the critical role of occupational information and counseling for high school students has been increasingly emphasized. Despite its importance, the limitation and inadequacies of occupational information and counseling for high school students have been described in recent studies.[2]

Large numbers of high school students, it has been found, are not sufficiently aware of their own interests and abilities as they relate to occupational and educational choice.[3] The sharp contrast between youth's need for help with occupational planning and the actual help they have been receiving was recently highlighted by a nationwide survey of 32,000 eighth through eleventh grade students.[4] Numerous reasons contribute to this situation including inadequate numbers of guidance personnel, other priorities for counselor activities, limited preparation of counselors to function as career educators, and inadequate funding for programs.

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1 U.S. Office of Education. An introduction to career education. U.S. Department of Health, Education, and Welfare, Washington, D.C. : U.S. Government Printing Office, 1975.

2 e.g., Ginsberg, E. Career guidance. New York : McGraw-Hill, 1971

3 Campbell, R.E. Vocational guidance in secondary education: Selected findings of a national survey which have implications for state program development. Paper presented at the National Conference on Vocational Guidance, Development of State Programs, U.S. Office of Education, Washington, D.C. January 1968.

4 Prediger, D. et al. A nationwide study of student career development: Summary of results. Publication and Information Service Division, American College Testing Programs, Iowa City, Iowa, 1974.

While inadequate occupational counseling affects most high school students, certain segments of this population are even more seriously affected. One group that is in need of even more occupational counseling than their non-handicapped peers are physically handicapped students. Physically handicapped students confront not only the objective limitation of their disability, but the public's negative attitudes and their own limited experiences and awareness of their potential. This leads to their unemployment or under-employment.[5] The economic and personal loss to society in general and to the physically handicapped population in particular is enormous. Estimates are that nearly two million handicapped students will have complete schooling by 1977 without the skills necessary for participating productively in our society.[6] Because of a recent New York State decision concerning mainstreaming handicapped students and a major federal commitment to require education for the handicapped, it can be anticipated that a growing number of these students will be receiving their education in public secondary schools where the occupational counseling services are already limited.

Further factors reducing educational and occupational options available to the handicapped are societal stereotyping attitudes and behaviors, operating either through discrimination or more subtle forms of rejection. These societal proscriptions and stereotypes affect the handicapped by restricting the numbers and kinds of exploratory experiences available to them, in order to make wise educational and occupational choices.

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5 U.S. Congress, Report of Committee on Labor and Public Welfare on s. 1539, March 28, 1974, pp. 74-76.

6 Tapman, M.S. Two million without skills. U.S. Office of Education Bureau of Educational Personnel Development, Washington, D.C. February 1972.

The handicapped student may be further limited by internalizing the attitudes of society and thereby imposing further limitation on his/her educational and vocational development. In addition, families of handicapped students may also impose limitations on their handicapped children's educational and occupational development through this internalizing process.

Interviews and discussions with professional personnel currently involved in counseling and providing occupational preparation of this disabled population (e.g., Board of Education administrators, high school college advisors, university and college admissions officers) indicate that there is a minimum of activity related to the occupational counseling of the handicapped high school student. Those educators in a position to comment on the reasons for the apparent gap suggest such factors as the counselor's "inability to function adequately because of a lack of training," and avoidance of the disabled because "they are fearful of working with them." Their views of the services currently available have been confirmed by the current project staff. Prior to the first year of this project there was no provision for intensive occupational counseling for physically handicapped students in high schools.

What is needed is a model for the occupational counseling of physically handicapped students which is feasible within the given resources of the typical high school. A demonstrably effective model, which maximizes the handicapped students' potentialities and insures their fullest development for their own personal benefit, and for that of society as well, could then be disseminated state-wide for use with other handicapped students. This project develops one such model through which physically handicapped high school students receive appropriate and effective occupational counseling.

The necessary features for this program include increasing handicapped students' awareness of the educational and vocational opportunities available to them, with a strong advocacy orientation; increasing counselors' sensitivity to the somatopsychological effects of physical disability on handicapped high school students' development;* and developing a program that integrates students' cognitive understandings, feelings and behaviors so that specific student behavioral outcomes are developed. Such a program, specifying learner outcomes, combines counselor training, didactic presentations, group and individual counseling, and field experiences, and involves the parents of the students to achieve its goals. Such a program considers the need to expand the competencies of general counselors, allowing for the attainment of the additional specialized knowledge and skills needed to undertake occupational counseling with physically handicapped people. This widened scope of competencies will increase counselors' service potential as well as their employability. In addition, internships established in undermanned settings will provide needed service to physically handicapped students.

C. Specific Objectives of the Project.

The OCP Project initially had two types of objectives--those involving provision of services directly and indirectly to physically disabled high school students and those involving the training of counselors to work with these students by means of a one-year internship. Soon after the project began, the staff decided to add a third objective, namely, the development of a model for a new specialty within the counseling and guidance field--the counselor who works within a special education framework and is specifically trained for that role.

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*Meyerson, L. Somatopsychology of physical disability. In W.M. Cruikshank (ed.), Psychology of exceptional children and youth (2nd Ed.), Englewood Cliffs, N.J. : Prentice Hall, 1963, pages 1-52.

1. Objectives for the Physically Disabled Student:

   a) To develop greater self-awareness and vocational maturity;

   b) To expand knowledge of educational and vocational opportunities;

   c) To develop greater self-confidence in their ability to achieve their educational and occupational goals;

   d) To develop more effective strategies and greater flexibility in achieving their goals;

   e) To help parents play a more realistic and facilitative role in their children's educational and occupational development;

   f) To increase student attendance at school.

2. Objectives for the Counselor Intern:

   a) To develop competency-based field experience that specifies learner outcomes in cognitive, affective, and behavioral areas;

   b) To provide counselors-in-training with direct supervised experience in working with handicapped high school students, e.g., individual and group counseling, family counseling, career-choice counseling;

   c) To increase the availability of trained counselors with experience and competence in working with handicapped students.

3. Objectives for the Development of a Model Counselor Role. These were not spelled out in detail at the outset of the first year of the OCP Project. During the course of the year, we were able to develop ideas for the major components of such a model.

D. Preparation for the Project.

1. Selection of the Schools. The Bureau for the Education of the Physically Handicapped (BEPH) of the New York City Board of Education aided the Project staff in selecting the two high schools where the interns were to be placed, and two additional high schools where only pre- and post-data would be collected for comparison purposes. Further, the supervisory staff of the Bureau aided in our introduction to the high school administrations and special education staffs, so that we were able to begin working soon after official notification of the award of the grant.

The two schools will be designated as Service Schools A and B. School A is an inner-city school with a total population of approximately 3,000 and a double-section class for physically handicapped students (HC-20 class) containing approximatly 40 students from ninth through twelfth grades and staffed by two special education teachers who are assisted by two aides from the New York City Department of Health. The population of the school is largely Black and Puerto Rican, and comes from many parts of the borough.

The students are all mainstreamed and use the special education classroom as their homeroom, as the place to come during study periods and often during lunch periods, and in general as a home base where they receive special help and attention from the special education teachers and from the several specialists who visit the school during the course of the week--reading, speech, physical therapy, driver education, and our counselor interns.

Service School B is near the edge of the city in a residential area with much more of a suburban than city flavor in many ways. The population of the school comes from many parts of the borough. Of the total 3,500 students in the school, fewer than half are Black or Hispanic. There are approximately 20 students in the HC-20 class, which is staffed by a special education teacher assisted by two aides from the Department of Health. Here, as in Service School A, the HC-20 students are mainstreamed for most of the school day, and they use the HC-20 classroom as their homeroom and home base for study periods, lunch periods, and for service from various specialists.

2. Selection of the Interns. The Guidance Laboratory of CUNY, also a unit of the Center for Advanced Study in Education, was conducting a special master's degree program in counseling at the time the OCP Project began, and the twelve students in this program, all full-time, were ready for

a two-day a week internship to begin in the fall term of the 1975-76 school year. It was therefore a relatively simple matter to select five of those graduate students for the OCP internship and to assign three of them to Service School A and two to Service School B.

All the interns had, at that point, completed two semesters of full-time study, including courses in the areas of individual and group counseling, assessment, vocational development, and research methods. In addition, they had had a great deal of laboratory and field experience as intrinsic portions of the courses, and all had completed a two-day-a-week field work experience during the spring semester in a school, college, or agency. During the fall 1975-76 semester, they were studying organizational development and were completing individual research projects required for the master's degree.

Among them the five interns had had previous work experience in child care centers, in public schools, and in a variety of clerical, business, and artistic fields. They ranged in age from the early 20's to the mid-30's.

3. Pre-Service Training of the Interns. For three weeks prior to the initiation of the project in the schools, the interns received intensive orientation and preparation with emphasis on disability and rehabilitation. Specific topics included the following:

a) Dealing with one's own feelings regarding physical disability and feelings in working with people with disabilities. The closed-circuit television facilities of the Guidance Laboratory were used during this part of the training as well as role-playing;

b) Constructs, issues, and techniques in counseling the disabled. A major contribution was made by Dr. Jacob Jaffe, a rehabilitation specialist then with the Columbia University School of Social Work;

c) Understanding and serving the needs of the disabled. The consultant for this topic was Mr. Fred Francis of the Human Resources Center and himself confined to a wheelchair;

d) The organization and functioning of the New York State Office of

Vocational Rehabilitation. This was accomplished mainly through a visit to the Office of Dr. Sol Warren who is the state director of intern training for OVR;

e) The role of a major rehabilitation center. The interns and staff of the Project visited the ICD Rehabilitation and Research Center, where they heard from several staff members and toured the facilities. Special attention was given to ICD's own work assessment system--the TOWER system and the new micro-TOWER. The interns returned some weeks later for intensive examination of the library's contents and services;

f) Resources and placements for the disabled. An advocacy model was presented by Dr. Max Frielich, a counseling psychologist with the Bronx Veterans' Administration Hospital;

g) The organization and functioning of the Bureau for the Education of the Physically Handicapped of the New York City Board of Education. The director of the Bureau, Mr. Marcus Arnold, and several of his staff, described in detail the many activities under their direction in the school and the services offered by the Bureau itself.

h) Evaluation and school placement of the handicapped student. This topic was examined particularly during a visit to one of the Evaluation and Placement Units of the New York City Board of Education.

In addition to all this, the intern who functioned as resource coordinator for the OCP Project began to collect published and other materials to be distributed to the interns or kept on file in the Project office. A list of these materials is included in an Appendix.

II. The OCP Program in the Schools

Following the period of orientation and inservice preparation, the five interns began their work in the schools in mid-October and continued through the middle of June. During the course of this school year they introduced many activities: individual counseling, group counseling, arranging for and conducting field trips and guest speakers, assembling newsletters for parents, and consulting with professionals of many kinds in the school and in outside agencies. These will be spelled out below, but first a brief description of the disabled students who were served is in order.

A. The High School Students.

Although the project proposal specified that we would work with forty students in the two service schools and would pre- and post-test an additional forty in the two comparison schools, it turned out that we actually had approximately sixty students in each category. In addition, we included several learning disabled brain-injured students (from an HC-30 class) at one of the two schools served, partly in order to increase the size of counseling groups to a desirable size, and partly because of the interest of the special education staff at that school in providing counseling for some of the learning disabled students.

There was a wide range of disabilities--among them spina bifida, cystic fibrosis, scoliosis, traumatic paraplegia, diabetes, hemophilia, epilepsy, asthma, hemiplegia,muscular dystrophy, and cerebral palsy. In most of these categories there were only one or two students each; but approximately one third of the students were diagnosed as having cerebral palsy. Degrees of handicap varied from very minor in the case of several of the students to very marked in the case of several who were completely confined to wheelchairs.

The students ranged from ninth through twelfth grades and were mainstreamed in all classes except for a small number of HC-20 (physically handicapped) students at Service School B who enrolled in a special vocational program at that school.

In a later section, details will be given regarding specific test scores and other quantitative data about the students. One noteworthy finding is that the group as a whole is below average on reading tests and other measures of educational achievement, although there was a wide range. It is not clear to what extent this results from missing school over the years because of their disability, from difficulty in handling the tests themselves due to effects of their physical disability, or other factors.

In general, these students seemed to be coping well with the physical aspects of their disability and on the whole seemed well motivated to achieve in school and vocationally. However, there was a very wide range in both respects and most of them seemed to be in need of a good deal more information about the world of work and a good deal more awareness of the various components that would go into effective vocational functioning. (For details see sections below reporting scores on the Vocational Maturity Inventory and other measures.)

In each Service School, the students live in many different parts of their borough; this fact, in addition to the difficulty they face in traveling, makes for anything but a neighborhood school situation and makes it very unlikely that they see each other anyplace except in schools. This fact makes it even more important that they receive special help in dealing with social aspects of their lives.

Apparently, few of the parents are seen in school. According to the special education teachers, in most of the homes either both parents work or are so burdened that they find it difficult to visit the school, which is in both instances a long distance from most of the students' homes. This situation made for some major obstacles in the path of our efforts to reach parents.

B. School Staffs.

The staffing arrangements differed quite a bit in the two service schools. At Service School A, there was a double class with two special education teachers and approximately forty students. These two teachers receive their professional supervision from the Bureau for the Education of Physically Handicapped (BEPH) of the Board of Education, although they report to the principal of the school for local administrative purposes including scheduling of their students.

At Service School B, there is one special education teacher for the class of approximately twenty physically handicapped students. However, in this school, there is also an HC-30 class of learning disabled students and a special vocational training program whose students include both learning disabled students and physically handicapped students. That program has a faculty of four, one of whom also serves as the homeroom teacher for the learning disabled class. In addition, there is a full-time person designated as coordinator of all special education for this school who acts as supervisor for all the special education programs in school. That coordinator and all the special education staff receive their professional supervision from their Bureau at the Board of Education but are under the jurisdiction of the building principal for certain administrative matters.

Thus in both schools, there is something of a dual supervisory/administrative structure, which sometimes makes it more difficult for outsiders such as our interns to obtain space to work, to arrange times when students are free to be counseled, and to obtain approval for field trips and other special projects.

The disabled students at both schools also enjoy a number of special services. For example, the Department of Health of the City of New York assigns two aides to each school to assist the children with transportation, dressing, lunch, and bathroom access. The Department of Health also provides physical therapists who visit the classes regularly and school nurses who visit the classes during their infrequent days in the schools. Speech therapists, reading specialists, and driver education teachers are frequent visitors to the classes, some of them on a regular weekly basis.

C. Program and Activities.

The proposal for the project envisaged a rather highly structured program of activities with each student experiencing a series of individual group counseling experiences. Like so many well-laid plans, this one had to be modified considerably because of the circumstances at both service schools. We soon discovered that the students had few if any free periods during the school day and what few study and lunch periods they did have were often being used for conferences with the special education teacher and with speech, reading and physical therapy specialists who came to the school. Therefore, it was difficult to schedule most of them for regular full-period individual conferences and almost impossible to schedule more than a few for group sessions because seldom were three or more students free to join a group at the same time.

Therefore, a great deal of the work was done in more informal contacts. There was considerable variation between the two schools in this regard, in part because of differences in the physical and psychological conditions in which the HC-20 classes functioned, and also because of differences in personal style of the interns.

1. Individual Counseling. According to the interns' logs and case reports, each student experienced on the average seven formal individual counseling interviews and twelve informal individual contacts, the latter ranging from half-hour unscheduled conferences to a few minutes of: "How are things going with your math class?" or "Have you been thinking any more about careers?" There was a wide range as to numbers of contacts. A few students were not seen at all for formal counseling sessions, while at the other extreme several students were seen between 15 and 20 times. Informal sessions ran between 2 and 30. There was a tendency at Service School B to have more formal sessions and fewer informal ones than at Service School A. This probably was related largely to the more informal physical layout of the classroom at Service School A and perhaps the fact that the 40 students there all shared one large homeroom.

The interviews dealt with a wide variety of matters involving career planning, personal assessment, self-acceptance, and social and family relations. There was a tremendous variety as to specific topics dealt with and specific activities engaged in. A sampling includes:

--Administered the Vocational Card Sort and then explored the Career Corner in the library;

--Discussed methods of coping with the frequent moves from hospital to home, and home to school and then back to the hospital;

--Helped students prepare resumes and learn to fill out job application forms;

--Discussed hobby activities and possible occupations that might be related to them;

--Examined samples of the student's art work and discussed careers in art;

--Helped student develop assertive but non-fighting ways to handle situations where someone hassles him;

--Reviewed college catalogs together to help student learn how to find needed information;

--Discussed chronic truancy and ways of handling the problem of getting up on time in the morning, which was the usual reason for the truancy;

--Discussed feelings about the student's disability and the resulting discomfort.

It should be noted that even the formal interviews rarely could last even as long as a half hour because of the time needed for the student to get back from his previous class and to get to the next one.

We also learned during this first year something about the tremendous range in students' felt need and desire for counseling. At one extreme were several students who reached out to the counselor and requested frequent interviews; some of these would have chosen to have a full period interview every day that the counselor was in the school if they could. At the other extreme were those who refused the counselor's offer of an interview or who had nothing they wanted to talk about if they did have an interview. To some extent the differences among students in this regard reflect differences in vocational maturity; later discussion of the results of the Career Maturity Inventory in this report point out not only this kind of range but also the low level of vocational maturity of their classes as a whole.

Because of the extra obstacles that these students face in their vocational and personal lives, it is essential that they receive all the help they can use in developing self-awareness, making decisions,and formulating career plans. Our experience during the past year suggests that counselors must introduce such activities as field trips, guest speakers, and films

to provide concrete referents about the world of work and to stimulate interest in career planning and thereby to bring the vocational maturity of these boys and girls to a higher level. This calls for a more active and aggressive kind of counselor behavior than usual and more of an outreach approach rather than waiting for students to request counseling services at times of crisis.

2. Group Sessions. At Service School B, it was possible to involve almost all the students in some kind of group activity. At Service School A, in part because of scheduling problems, only about half of the students participated in groups. The average number of group sessions attended by those who did attend groups was 7 to 8 at both schools, though the number ranged from 1 to 15 for individual students.

The group sessions varied greatly in topic and process but the typical groups were rather structured and developmental in nature. That is to say, the intern came prepared with a topic and with a specific plan for a simulation or a game or other activity that would provide an experience to help the group members learn something about themselves or the outside world in relation to the topic.

The interns as group leaders found that they had to modify their usual techniques, in part because of the slow pace at which many of the disabled youngsters responded, in part because many of the youngsters had internal psychological blocks to opening up before a group, and in part because the designated period, which at maximum provided 40 minutes, actually allowed a half hour at most because of the time needed for many of the students to get to and from classes.

With all the obstacles, not the least of which was obtaining suitable rooms to conduct the groups, it was remarkable that so many of the groups did meet regularly and that a number of the sessions went very well indeed. The less structured groups dealt with many matters such as how disabled people are treated by others, social activities for people with handicaps, planning for independent living and marriage, etc. The more structured groups included such topics as decision-making skills, broadening one's scope of occupational awareness, learning to trust others, becoming more assertive, clarifying one's work values, and dealing with ridicule. The interns made frequent use of many games, simulations, and other techniques they had learned in their previous counselor education courses.

3. Case Conferences. At Service School B the two interns were successful in initiating a series of case conferences, at each of which one or two students were discussed. That school lent itself particularly well to this activity because, between the physically handicapped class, the learning disabled class, and the vocational program, there were a number of staff members who knew the students--the special education coordinator, the special education teachers assigned to each of the two classes, and the vocational staff of three additional teachers of whom one is a nurse. The assistant principal who is administratively responsible for the special education area in the school was also invited and attended some of the sessions, as did the speech teacher who visited the school twice each week.

Both CUNY supervisors--the Project Director and Project Associate--attended several of the case conferences and were highly impressed with the excellent manner in which the school personnel and the interns developed effective ways of preparing for and conducting the conferences so that a great deal could be accomplished in a school period. Conference

participants found that each person had something unique to contribute and that together they were able to expand their knowledge and understanding of the student being discussed and to plan more effectively for referral and for their own work with the student.

4. Field Trips. One component of the OCP Project was to provide students with direct exposure to the world of work. We planned to do this by means of field trips to work sites where students could see what people actually do at work. In addition, they would see role models on the job, individuals who have developed careers and are disabled. Our goals were to expand channels of communication with industry, raise students' awareness of educational and vocational opportunities available from business, and provide information about employers' expectations, the job market, and employment outlook. At the same time, we hoped that contact with disabled students would increase industry awareness of the great variation within disabilities, and perhaps help to reverse negative attitudes and sterotyped opinions.

We were able to arrange visits to two occupational sites for each Service School. Students from Service School A visited McGraw-Hill Publishing Company and United Feature Syndicate. Students from Service School B visited the Xerox Corporation and Radio Station WTFM. Students at Service School A also visited Long Island University.

Various resources were used to establish contact with industries, including agencies that place handicapped workers, publications, and personal contacts. Some companies that we approached did not permit visits; some may have been willing to host a visit but needed more time for planning. Many phone calls were made and letters written to track down leads and coordinate planning details. Transportation arrangements, which are much more

difficult for disabled persons since special vehicles are required, were made either by the HC 20 teacher or the resource coordinator upon confirmation of a field site.

Several factors entered into selection of a field site: Location of the company, wheelchair accessibility, distances between departments, architectural barriers, employment of any disabled persons, willingness of able and disabled employees to discuss their own career development with students, and student requests.

As preparation for a trip, counselor interns met with students and first discussed what they would look for and then provided a written sheet of questions they might ask. From our experience it appears that preparation is the key to a successful field trip. Not only does it help students think about the kinds of occupational information to seek, but it seems to have a "freeing" effect, providing a kind of "permission" to raise questions.

On field trips students asked questions requesting information about training and required skills (Do you have to be a good typist to work the computer?); questions reflecting their feelings (But how do you know what's what all at one time?); and questions relating to their disability (Obviously I'm in a wheelchair. I've learned that you have a physical disability, and I'm wondering if your disability hinders you on the job.) Students met and talked with disabled workers at three sites.

Generally students knew very little about what to expect at a work site. They observed and reacted to the environment, the variety of jobs, and the equipment. Very few students had ever even been in an office building before. An exciting moment occurred when one disabled student who, after an accident, was discouraged about her future employability, realized upon meeting the

receptionist at WTFM that it was a type of work she could do physically and enjoy because it involved interacting with people. Experiences such as this are one example of how field trips can be used to extrapolate from a specific discovery to an awareness of a general need or interest. In this case, meeting the receptionist led to a greater awareness of the student's orientation to people; therefore, she may now consider other people oriented jobs.

To maximize the value of field visits, counselor interns attempted to conduct follow-up meetings with students. This was only minimally effective, in part because the field trips occurred so late in the year, and needs more attention. The good reactions of students to field trips, however, would indicate an excellent potential for integrating the field trip experience with counseling. Therefore, trips should be made early in the year with careful planning for preparation, securing materials, making transportation arrangements, and following through.

It is also important to keep in mind that the focus of our field trips is career education, not social studies. Companies tended to demonstrate their operations, rather than talk about occupations and the career development of their workers; therefore preparation of the company is also indicated. However, opportunities for "hands-on" experience with equipment were very well received. All field trips except one were tape recorded for later study.

5. Speakers. A primary goal of providing speakers was to give disabled students role models of disabled people who have developed careers and are working. Bringing speakers to the classroom also offered the opportunity to reach a greater number of students, as field trips were usually limited to a maximum of ten students at a time. We tried to select speakers who were former students at the two Service Schools and we also gave consideration to obtaining speakers who represented different levels

and types of occupations. To obtain appropriate speakers, inquiries were made of special education teachers, agencies, ERDOE staff, and counselor interns. All presentations were tape recorded for later study, summarizing for the newletter, and use at intern training seminars.

Two speakers from the United States Civil Service Commission, one of whom was disabled and wheelchair bound, addressed students at each Service School on the topic of civil service jobs for the handicapped. At our request they provided pamphlets such as "Employment of the Physically Handicapped in Federal Service," sample job announcements, and application forms. In addition, they discussed their own career development, and in the case of the disabled speaker, how he transports himself, and his feelings about being disabled.

As with field trips, students asked many questions ranging from such basic ones as "What is civil service?," to very concrete ones such as, "Do they have any jobs with animals?" Additionally, we learned about special programs and deadline dates. This kind of information carries important implications for the proactive role counselors might play in a special education setting by assuring that students know about opportunities, meet application deadlines, and prepare for interviews.

A former student at Service School A, who has muscular dystrophy, and is wheelchair bound, spoke to students there about how he formed his own transportation company and developed his career path. Here students' questions were much more personal such as "Who helped you in the beginning," and "Did you find any discrimination?"

A great deal was learned from our experience with speakers, particularly that preparation at all levels is essential. Counseling sessions with the students and discussions with the speaker (to point out for example, that his language cannot be too abstract because our students have had little

exposure to the business world) aid greatly in maximizing the usefulness of a presentation.

The issue of the high cost of transportation for disabled individuals was forcibly brought home to us by the cost of transporting students to field sites and through our contact with disabled workers. It is disheartening to see how self-sufficiency can be blocked because of the excessive expense of transportation.

6. Newsletter. Since we were not experiencing much success in contacting parents, it was decided to publish a newsletter to establish communication between the OCP Project and parents and guardians (see appendix for copies). Our goal was to offer information and resources, as well as to provide an opportunity for students, staff, and other interested persons to express themselves.

Six issues of "LINK" were published in April, May and June, three for each Service School. We tried to have a column in which counselors describe their role and function; a teacher's column on any subject about which he or she would like to communicate with parents (this column includes auxiliary personnel such as physical therapists, speech teachers, and driver education instructors); a student's column; an informational column which would include information about whom to call or write; a deadline or important dates column; and an alumni news column. When possible, the important dates column was also published in Spanish.

The newsletter was mailed monthly to parents and guardians of disabled students at both schools. It was also sent to personnel at the Bureau for the Education of the Physically Handicapped of the Board of Education, Service Schools staff, Department of Health staff, related agencies, and other concerned individuals.

Staff, students, and others reacted enthusiastically to the newsletter. However, there was very little feedback from parents. In spite of frequently repeated suggestions in the newsletter that parents contact us by phone or in person for information or discussion, to our knowledge we did not hear directly from even one parent as a result of the newsletter. A possible reason for this may be the many parents who reportedly may not read English. It may be desirable next year to at least test out whether publishing in Spanish would bring more of a response from parents.

A considerable amount of time was devoted to publishing the newsletter due to difficulties in managing the logistics. Typing, xeroxing, and distributing also consumed time. For the coming year, efforts would be made towards tighter coordination where possible, particularly in view of the planned addition of two Service Schools. The basic format could be the same, perhaps with the addition of a column from community college counselors to establish articulation.

7. Materials. The project staff acquired and disseminated to counselor interns and Service School staff a variety of articles, pamphlets, bibliographies and other materials relating to physical disabilities and career development, as well as directories of agencies and Board of Education bureaus.

Some of these materials provided information about specific physical disabilities and referral sources for services and materials. Others provided information about current legislation and other activities in various levels of government. Still other materials related to issues surrounding the employment of disabled persons. A complete list of all materials acquired may be found in the appendix.

8. Videotaping. During the pre-program orientation of the interns we recognized the potential value of audio-visual materials that could be used to provide understanding of the students and the school and could also help the interns to deal with their feelings and attitudes regarding physical handicaps. Fortunately, the Guidance Laboratory of CUNY, which was providing project staff and facilities, had had a great deal of experience in working with videotape. Accordingly we were able to arrange for staff and equipment and spend a week shooting eleven hours of raw footage at Service School A. This included interviews with students and a number of regular and visiting staff, group counseling sessions, and some of the normal activities that occur during the course of the day in the HC-20 classroom.

This raw footage is immediately usable, especially by people experienced in working with videotape for instructional purposes. This material was in fact used during the latter part of the school year for a number of case conferences and seminars with the interns in this program. In addition, our intention is to edit the tapes as soon as funds can be obtained for this purpose, so that the eleven hours of tape can be reduced to perhaps three 30-40 minute tapes, each focusing on a particular aspect.

D. Relationships with Interns: Consultation, Supervision and Inservice Education.

The supervision of the intern counselor in this project was a rather complex matter and involved a number of people.

One type of supervision had to do with the physical presence of the interns in the school, their access to rooms to do their work, and their awareness of school policies and procedures. The major person with whom they dealt on such matters was the special education homeroom teacher. At Service School B, this was a dual relationship because there was also a

coordinator of special education for the school and the interns had therefore to learn which matters they should take to that coordinator and which ones to the teacher. At Service School A there were two special education teachers, but they had worked together for a long time and worked together very closely, so that the interns could rather quickly relate to both of them without need for concern about areas of territoriality.

The interns met the principal at each school and also assistant principals, guidance directors, and counselors, to different extents at the two schools. All these relationships were limited, the ones with administrators because the interns handled most of their administrative needs through the special education staffs, and the ones with the school guidance staffs because those staffs had little or no contact with the HC classes. (The Bureau for Education of Physically Handicapped of the Board of Education has only two counselors on its staff to serve all the classes for physically handicapped students throughout the city and, obviously, cannot be available for supervision of any kind.)

The special education staffs of both schools were greatly helpful to the interns in many ways--providing information and understanding of the students, providing leads to the many special services available inside and outside the school, and giving support to the interns' efforts.

In addition, there were Board of Education reading and speech personnel who visited the HC-20 classes regularly and who were generous in time with the interns. Excellent working relationships were established with these people and with the physical therapist assigned to the classes by the Department of Health. Often valuable insights about individual students were obtained through these relationships.

The major share of supervision about counseling itself was provided by the CUNY staff. First, either the Project Director or Project Associate visited each school each week; often both visited the school each week. During these visits each of the interns was seen to discuss the detailed daily logs of experiences and feelings that the interns kept, and to review special problems and needs. During these visits the supervisors tried whenever possible to observe the interns in individual or group conferences. Also, the CUNY visitors "touched base" with the special education teachers and other school staff members at each visit and sought out matters on which university and school could collaborate. The CUNY staff supervisors dealt not only with individual cases but also with the broad concerns of functioning in institutional frameworks.

A major supervisory and educative experience was the weekly seminar which was held at the Guidance Laboratory. During these two-hour meetings, interns exchanged experiences and ideas, specific cases and techniques were discussed, and the CUNY staff introduced topics for presentation and discussion. On occasion, visitors were invited to attend these seminars; two of those visitors were nurses from the New York City Health Department, one of whom serves Service School A, and the other a colleague of hers who also serves in the public schools. They gave excellent presentations on medical aspects of physical disability.

During the final month of the school year, the interns prepared detailed individual case reports for all students with whom they had worked during the year. (A copy of the form used is included in an Appendix.)

During the course of the year, two additional inservice education activities were conducted. One was a case workshop held at the Guidance Laboratory to which we invited as consultants a clinical psychologist who works

in a rehabilitation setting, a counselor with many years of experience in vocational counseling and career development, a counselor from a major rehabilitation center, and an OVR counselor who, at that time, was assigned to one of the Service Schools. This was an all-day workshop, so that each intern was able to present one or more cases for the panel's reactions.

The other activity was a visit to the Institute for Rehabilitation Medicine. This served two major purposes: first was to become acquainted in detail with the services of the Institute and the many types of specialists on its staff. The other was to have a case conference with several members of the Institute staff at which students from the two high schools who were know to the Institute were discussed, so that insights and information could be exchanged and plans for future work with the client could be jointly formulated.

III. The Role Model

Some progress was made during the year toward the conceptualization of a role model for counselors working in a special education setting like this. The experiences of the year in trying out techniques and materials and learning to cope within the schools and within the special education programs provided data that contributed toward the development of some beginning conceptions of the role model.

At this point, it appears that the counselor in this setting must play a complex role that includes direct services to the students; consultation with the special education and regular classroom teachers and with school administration; a colleague/teamwork relationship with reading, speech, physical therapy, nursing and other specialists; a coordinative/outreach relationship with outside agencies such as OVR, IRM, and others, and a relationship with parents that includes exchange of information and the giving of support and understanding.

The role, while emphasizing career planning, must also include many other facets of the person's life -- personal, emotional, family, sexual, social, economic, and medical. For all people career is intimately related to all aspects of one's life, both in terms of these aspects feeding into career choice and development, and in terms of career itself affecting all other aspects of one's life. With people who are handicapped because of physical conditions, the interdependence of career and other aspects of one's life is even greater.

Somehow, counselors working in such a setting must find ways to help these students to deal with all these aspects of their lives. This calls for a careful and delicate balance between structured and unstructured counseling contacts, between a remedial/therapeutic focus on immediate

problems and a developmental focus on long-range life planning, and between direct service to the individual and indirect service by working with "important others" in the student's life -- teachers, parents, rehabilitation agencies, employers, etc. All of this complexity is found in the work of almost any counselor who works in an institutional setting of any kind -- school, college, hospital, or industry. It is perhaps more complex in the case of the handicapped high school students because there are so many environmental forces and services involved in their lives -- the special education program, the regular school program, the special resource people in the school, and the outside medical and rehabilitative agencies and personnel they are in touch with.

So the role model will have to include something of the role of the school counselor, of the rehabilitation counselor, the social worker, and vocational counselor, along with major coordinative and consulting functions. During the next year, we will be working on the task.

One helpful approach that we began during this past year was the use of Network Analysis, which is a method for examining the people that the counselor actually relates to during the course of the week, and the ways in which they related. Using this method involved: obtaining lists of people whom the counselor worked with, reporting on the topics discussed, estimating the interaction times, noting who initiated the interaction, and judging the worth and effectiveness of the meeting. Counseling interns studied the content and pattern of their own interactions in relation to the project goals. For example, one analysis illustrated the need to increase contacts with the regular classroom teachers of students.

During the course of the year, it was found that the intern staff interacted with numerous individuals in the following 31 occupational and role categories:

1. Service School Personnel - Permanent

   Special education homeroom teacher
   Special education classroom teacher
   Special education coordinator
   Special education supervisor
   Health aide
   Regular classroom teacher
   Principal and Assistant Principal
   School counselor
   School secretary
   School custodian
   Librarian

2. Service School Personnel - Visiting and Affiliated

   Health Department administrator
   School physician
   School nurse
   Physical therapist
   Speech therapist
   Reading teacher
   Driver education teacher

3. Non-School Personnel

   Counselor, agency
   Counselor, college placement
   Counselor, job placement
   Coordinator of CUNY college placements
   Social worker
   Agency medical personnel
   Speakers for students
   Industry personnel and representatives
   University support staff
   Association representatives

4. Additional Clients

   Parents
   Former students

It is clear that providing counseling services to students requires more than dealing with students themselves. The broad range of contacts required underscores the extent to which the counselor role requirements go beyond clinical - counseling b haviors to include skills in building interpersonal relationships and solving problems with the help of other team members.

IV. The End-of-Year Conference

During the course of the year, we frequently heard from school staff members comments to the effect that they were interested in learning what was happening in the other schools. We realized that there was a strongly felt need for interaction with colleagues in special education at other schools.

At the same time, the project staff felt the need to bring together some of the school staff with the project interns and staff for the purpose of assessing what had been done and planning future activities.

Accordingly, we set up a half-day conference at the Guidance Laboratory for June 18, 1976, beginning with lunch and continuing on through the afternoon. Present were seven special education teachers from the two Service Schools, three people from the Bureau for the Education of Physically Handicapped of the Board of Education (two borough supervisors and a counselor), two speech therapists, a reading teacher, and a physical therapist who serve the special classes at these two schools, five interns, the two project staff members, and a member of the IRDOE staff.

After lunch we implemented a plan we had earlier developed to acquaint the visitors with some of the kind of activities the interns had engaged in at the schools. This was done by dividing the visitors into three groups and then having each group of five spend about ten minutes in each of three demonstration/workshop experiences, one on preparing for and making a field trip to a place of work, a second on assigning values to work-related objects, and a third on "first impressions," with implications for the way non-disabled people get impressions of disabled people. Each was conducted as a simulation or game followed by debriefing; this turned out to be an excellent way of conveying in a short time a meaningful overview of these

activities as they were conducted in the schools.

Following the demonstration/workshops, there was a general session at which we asked for reactions to the entire year's experiences with the interns and suggestions for the following year. A number of helpful ideas were forthcoming.

One group of suggestions had to do with seeking early introduction to the general faculties of the schools, perhaps at a faculty meeting, so that the entire school would be more aware of the intern counseling program. A second related suggestion was to become more actively involved with the regular guidance staff of the schools, toward the goal of some degree of collaboration.

There was also considerable discussion of ways of reaching parents. Most strongly recommended were workshops on attractive topics, preferably held out of the school in a more social kind of setting where the entire families could be invited to attend.

Finally, there was a general agreement that this kind of meeting is very worthwhile but should be held earlier in the year -- perhaps during Regents Exam week in January -- so that planning could be done for the remainder of the year.

V. Student Data -- Descriptive and Comparative

A. Overview.

The goals of this data collection effort were both descriptive and comparative. The descriptive presentation of the collected data seeks to present in demographic, subjective, adjustive and vocational terms an overview of students encountered during the course of this project. The descriptive presentation seeks particularly to help in ameliorating the lack of information about physically disabled students in a school setting in relation to performance on standardized tests. This lack of descriptive information often leads to difficulties in program planning and materials development. The other element of this data presentation involves comparing the Service Schools with the Comparison Schools to determine if measured changes occurred over time which could be attributed to the implemented counseling project.[7] Finally, the entire data collection effort also explored the feasibility of utilizing various types of assessment techniques with school based disabled students.

Data were collected on all participating students in the two Service Schools (three classes) and two Comparison Schools (three classes). Demographic information about students dealt with such information as grade levels, reading levels, disabilities, etc. Vocational information included scores on the Career Maturity Inventory[8] -- a measure of attitudes and competencies that are important in career decision making -- and the results of a survey of occupational and career plans of students. Subjective evaluations

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[7] It was not feasible to set up either a matched or randomized group design since intact existing groups were used for this project. The Service Schools were only roughly matched with the Comparison Schools on degree of "urbanness." Since this was the case, the term comparison rather than control is deemed more appropriate.

[8] Crites, J.O. Career maturity inventory. Monterey, California: CTB/McGraw - Hill, 1973a.

by students of their environment consisted of self-reported ratings of 11 concepts in their lifespace, e.g., my goals, myself, school, my future. Classroom adjustment of students was also assessed through teacher ratings of students' behavior and performance in the classroom. All but the demographic data was collected on a pre and post basis (November, 1975 - May 1976).

The total number of students registered in the three Service Schools and Comparison Schools during the project year was 72 and 59 respectively (total = 131). However, because of January graduations, extensive absenteeism, and students leaving school, the total number of students on hand dropped at times to between 100 and 110 students. Students were also added to the class during the course of the year. The shifting and variable populations encountered, while no real problem for the counseling portion of this program, presented a number of problems in the collection and statistical treatment of data. For example, some students taking the pre-test did not take the post-test, new students took only the post-test, and some students refused or were unable to complete various portions of the assessment instruments. In the two project schools the post-testing was briefly interrupted by a Bureau-mandated reading test. Problems of this nature are not unexpected in assessing the effects of field-based programs. In fact, as they are enumerated here they will provide additional information on implementing a broad-based data gathering effort with school based disabled students.

B. Description of student population.

The occupational counseling project was undertaken with a population of students that was heterogeneous on a number of dimensions. Student characteristics of a demographic nature, which are outlined below, illustrate this point. The data categories reported on for all the project schools include: grade level, age level, reading proficiency, and disability. (Differences that exist in the number of cases across data categories are a result of

missing information.)

The number of students in each grade level varies from school to school. Table 1 summarizes the distribution of all students by grade level in all four project schools.

Table 1

Percent of Students in Four Grade Levels at the Project High Schools

	School			
	Service A	Comparison A	Service B	Comparison B
Grade	(n=45)	(n=34)	(n=22)	(n=22)
9	31.2	20.6	50.0	13.6
10	22.2	35.4	27.3	59.9
11	22.2	26.5	4.5	4.5
12	24.4	17.5	18.2	22.0

Students are distributed more evenly by grade at Service and Comparison School A than at Service and Comparison School B. A predominant number of students in Service School B are at the ninth and tenth grade levels as compared to a more even distribution at Service School A.

A wide age range exists at all four project schools (see Table 2). On the whole, some students were older than expected by grade placement which, in most cases, reflects their academic deficiencies (see Table 4). For example, at the 12th grade level student age characteristics (as of October 1, 1975) were as follows:

1) Service School A , $\bar{x}$ = 18.2 (n =11), range = 16.7 to 19.2
2) Comparison School A , $\bar{x}$ = 17.9 (n =6) , range = 17.2 to 19.1
3) Service School B, $\bar{x}$ = 17.8 (n =4) , range = 16.10 to 18.8
4) Comparison School B, $\bar{x}$ = 18.2 (n =5) , range = 17.0 to 19.5

Table 2

Age Characteristics of Students in the Project Schools

	Schools			
	Service A	Comparison A	Service B	Comparison B
Age	(n=45)	(n=34)	(n=22)	(n=22)
Mean	16.8	16.7	15.3	16.2
Range	13.2 to 19.2	14.0 to 19.6	13.11 to 18.9	14.8 to 19.5

Disabilities of students are widely distributed among 41 diagnostic categories with many of these conditions having multiple functional limitations -- e.g., cerebral palsy. The distribution of disabilities at the four project schools appears in Table 3.

Information on student reading levels,(see Table 4), a reflection of academic proficiency, was compiled using test data on file at the project schools. In some instances, teacher estimates were also used. Most of the reading information that was available to the project staff was 1 to 3 years old, except at Service School A where all students were individually tested during January of 1976. All physically handicapped students were given reading tests during May and June of 1976, the results of which were not available for this report. Because of limitations in the information available reading ability was calculated for comparison purposes in terms of the difference between the measured reading level and the grade level, at the time of testing. This statistic demonstrates the extent to which a student (or students) was reading below, above or at grade level when tested. Table 4 summarizes the average difference between reading level and grade level for students at all four project schools. The range of the differences is also given.

Table 3

Disabilities of Students in the Four Project Schools

Service A n = 45	Comparison A n = 35	Service B n = 22	Comparison B n = 22
Cerebral palsy (12)	Post polio (7)	Cerebral palsy (9)	Cerebral palsy (6)
Muscular dystrophy (5)	Cerebral palsy (5)	Asthma (2)	Post polio (2)
Post polio (4)	Muscular dystrophy (5)	Scoliosis (2)	Sickle cell anemia
Post trauma (2)	Spina bifida (5)	Cardiac	Cardiac
Scoliosis (2)	Cardiac (3)	Epilepsy	Cystic fibrosis and Arthritis
Spina bifida (2)	Asthma (2)	Epiphysis Orthopedia	Dwarfism
Arthrogryposis (2)	Paraplegia (2)	Hemophilia	Neurological disorder
Burns (major)	Brain injury	Legg perthe's disease	Osteogenesis imperfecta
Club foot	Hydrocephalus	Post polio	Paralysis of legs (occasional)
Congenital Amputee (arms)	Cerebral ataxia	Sickle cell anemia	Quadriparesis
Cystic fibrosis	Multiple sclerosis	Spina bifida	Regional enteritis
Diabetes	Sickle cell anemia	Tibia Vera	Rheumatoid Arthritis
Epilepsy	Slipped femural epiphysis		Scoliosis
Multiple sclerosis			Seizures
Orthopedic left foot			Spina bifida
Osteogenesis imperfecta			
Paraplegia			
Post-op triple orthosis			
Post-tumor (brain)			
Quadraplegia			
Slipped hip			
Transverse myelitis			
Ureterotomy			

Note. Numbers in parentheses indicate frequency of occurrences.

Table 4

Differences Between Reading Level and Grade Level
at the Project Schools

	Schools			
	Service A	Comparison B	Service B	Comparison B
Reading	(n=36)	(n=34	(n=20)	(n=21)
Mean	-3.7	-3.1	-2.2	-1.3
Range	-7.3 to 3.4	-6.2 to 2.0	-5.0 to 2.3	-5.3 to 3.4

In all four schools a very wide range exists in reading ability as evidenced by ranges in grade-reading level differences, with a span at the project schools from 7 to 10 grades. Descriptively, schools can be ranked in terms of relative reading ability as follows: Comparison B, Service B, Comparison A, and Service A with 76.2%, 85.0%, 91.2%, and 94.4% of their respective students reading below grade level when tested. The lower reading ability observed at Service A and Comparison A relative to Service B and Comparison B would appear to reflect the association of socio-economic factors with reading scores. The clustering of schools on reading ability appears to validate to an extent the a priori matching procedure, at least in terms of academic performance. Relative differences aside however, the reading ability data reflect extensive academic deficiencies on the part of most students -- in effect burdening them with an additional disability.

The overall implications of serving a heterogeneous population of this nature lie in the capacity of a program to develop multiple counseling strategies and materials which take into account the wide range in disabilities, academic performance, and psychosocial development of these students. The demographic data alone support the contention that specialized training

is needed to develop the capacity of counselors to deal with individuals whose needs and ability have such a broad range.

C. Career Maturity.

The primary vocational assessment instrument used in this project was a measure of career development (the Career Maturity Inventory).[9] The concept of career development entails a view of vocational behavior as developing over time. The choice of an occupation is seen as the result of a series of processes that unfold over time on a number of dimensions rather than as the result of a single event.[10] A model of those career dimensions that develop over time was advanced as an outcome of the Career Pattern Study,[11] and further refined by Crites.[12] Those developmental dimensions outlined by Crites include:

a) Consistency of career choice over time;

b) Realism of career choice in relation to personal capabilities and employment opportunities;

c) Career choice attitudes;

d) Career choice competencies.

Crites' effort has been to operationalize and measure with the Career Maturity Inventory those dimensions of career development that are especially relevant from late childhood to early adulthood -- career choice attitudes and career

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9 Op. Cit., Crites, 1973 (a).

10 For an early statement on career decision making as a process see Ginzberg, E., Ginsburg, S.W., Axelrad, S., & Herma, J.L. Occupational choice. New York : Columbia University Press, 1951.

11 Super, D.E., Crites, J.O., Hummel, R.C., Moser, H.P, Overstreet, P.L., & Warnath, C.F. Vocational development: A framework for research. New York: Teachers College Bureau of Publications, 1957.

12 Crites, J.O. Measurement of vocational maturity in adolescence: I. Attitude test of the vocational development inventory. Psychological Monographs, 1965, 79 (2 whole No. 595).

choice competencies. Career maturity in this model is conceptualized as both the extent to which one has acquired feelings about work and the career choice process (attitudes); and the extent to which one has acquired the problem solving and information skills (competencies), which will lead to an effective career decision. The attitudinal and competency dimensions in this model therefore represent developmental tasks to be mastered on the way to making a vocational choice. The rationale for the use of CMI with physically disabled students lies in assessing where these students are developmentally and in determining if vocational counseling interventions can increase their readiness for an upcoming career choice. The thrust of the CMI, as Crites points out, is different from trait-and-factor measures of aptitudes, interests and personality characteristics designed to facilitate the process of matching men with jobs, but is philosophically tied to a position which seeks to broaden the possibilities of vocational choice through vocational development.[13]

The attitude scale of the CMI consists of 50 true-false items which tap the feelings, the subjective reactions and the dispositions that the individual has with regard to making a career choice and moving into the world of work.[14] The five attitudinal clusters which make up the scale, along with sample items are given below:

a) Involvement in the career choice process.
   Sample item: I seldom think about the job I want to enter.

b) Orientation toward work.
   Sample item: Work is worth while mainly because it lets you buy things you want.

c) Independence in decision making.
   Sample item: I plan to follow the line of work my parents suggest.

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13 Crites, J.O. Theory and research handbook for the career maturity inventory. Monterey, California : CTB/McGraw - Hill, 1973 (b).

14 Crites, J.O. Administration and use manual for the career maturity inventory. Monterey, California. CTB/McGraw - Hill, 1973 (c)

d) Preference for career choice factors.
Sample item: Whether you are interested in a job is not as important as whether you can do the work.

e) Conceptions of the career choice process.
Sample item: A person can do any kind of work he wants as long as he tries hard.

The competence test of the CMI consists of five scales which measure the more cognitive elements involved in occupational decision making.[15] Each scale contains 20 multiple choice items. The five scales with sample items appear below:

a) Self-appraisal (Knowing Yourself).
Sample item: Duane does a lot of wood shop work at home and also takes shop courses at school. He has made several professional-looking cabinets and has won a prize for one in a citywide contest. He is now trying to decide if he has enough skill to continue with cabinet-making.
What do you think?

F The work he has done suggests that he has above average cabinetmaking skill and interests.

G If his friends think has has cabinetmaking skill, he probably does and should continue making cabinets.

H He should plan carefully, since he may not have enough skill to be a successful cabinetmaker later on.

J He has skill in making cabinets and he should also design them.

K Don't know.

b) Occupational Information (Knowing about Jobs).
Sample item: Tony carefully placed the piece of iron between the jigs on the surface of his drill press. Before going on, he checked his measurements and the exact place where he wanted to drill the hole. He then lowered the drill until it started to spin through the metal. When he finished, he again measured the inside of the hole before placing the iron in the bin next to his bench. This was the last piece in this job; after lunch he would set up his drill to work on connecting rods.
What is his occupation?

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15 Ibid., Crites, 1973 (c).

A optician

B instrument assembler

C machinist

D x-ray technician

E don't know

c) Goal Selection (Choosing a Job).
Sample item: Don has been on the debating team for two years and has been a Big Brother for children without parents. He likes working with people and has been president of the Junior Class in his high school. His best grades are in social studies. He has had high grades in all his courses and plans to go to college.
Which one of the following occupations would be the best for him?

A advertising copywriter

B production planner

C policeman

D social worker

E don't know

d) Planning (Looking ahead).
Sample item: Sophia has decided to be a printer. Three steps she can take to become one are:

1 train as an apprentice printer

2 pass journeyman printer's tests

3 get a job as a printer's "devil" (assistant)

Which is the correct order of these steps?

A 1 2 3

B 2 1 3

C 3 1 2

D 3 2 1

E don't know

e) Problem solving (what should they do?).
Sample item: John wants to be an engineer and has the ability to be one. But, his grades are poor and he thinks he may not get into college.
What should he do?

A Work harder and get better grades.

B Talk with his teachers or a counselor.

C Expect to get into colleges despite his grades, because he has the ability.

D Change his occupational choice to something else that doesn't require college.

E don't know.

The attitude scale consisting of 50 true-false items and the five competence scales each consisting of 20 multiple choice items make up the entire CMI. Items, and correct responses to them, have been rationally derived from career development theory and then empirically refined to differentiate among age and grade levels in adolescence. Thus, the higher the grade level the higher the expected score on any of the scales. The individual raw score for any of the six scales is the total number of correct responses to items on that scale. Grade norms are also provided for each of the six scales.[16] Readability of all six CMI scales is at the sixth grade level; however, because of some material, which includes technical terms, the competence scale has words and phrases that exceed a sixth grade reading level.[17] The suggested administration time is 30 minutes per section or 2½ hours when administered consecutively.

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16 Op.Cit., Crites, 1973 (c).

17 Op.Cit., Crites, 1973 (b).

The CMI can be considered as an intermediately validated instrument which is the product of an extensive and continuing line of conceptual and empirical development.[18] Research into the psychometric properties for the construction of this instrument (e.g., internal consistency, response bias, reliability and validity) has been undertaken on a large scale following the criteria set forth in Standards for Educational and Psychological Tests and Manuals.[19]

Modifications were made in the standard administration of the CMI to meet the special needs of physically handicapped students. The inventory was administered individually (or in very small groups of two to three) with students working at their own pace without speed requirement on any of the scales. Work on the inventory took place during 10 pre-testing and 10 post-testing days at each of the four schools. To minimize disruption of normal class routines, students worked on the CMI (as with other instruments) during free periods or in some cases during remedial reading and English classes.

Initially the plan was to have data collection undertaken by counseling interns. This strategy was quickly changed as it became apparent that a large consecutive number of time blocks had to be devoted exclusively to test administration. Faced with the prospect of three to four weeks of data collection (at two days a week) counseling interns were frustrated as their initial interactions with students were interrupted. In addition, it appears that the assigned researcher role thwarted the beginning resolution of feelings about working with the disabled. To remedy this problem non-counseling personnel were assigned to undertake testing and data collections. These personnel were familiar with test administration procedures. During the

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[18] Ibid, Crites, 1973 (b) for an extensive review.

[19] American Psychological Association. Standards for educational and psychological tests and manuals. Washington, D.C.:American Psychological Association, 1966

pre-test period, non-counseling staff undertook approximately half the data collection at the Service Schools and all of it at the Comparison Schools. For the post-test all four schools were assigned non-counseling staff for data collection purposes.

Use of a non-counseling data collection staff allowed for an easier introduction of customized assessment procedures for all instruments, including the CMI. For some students with reading difficulties the entire inventory was presented orally. For the post-test the type of help the students received from inventory administrators was recorded. Oral presentations at the four schools occurred as follows: Service B (29%), Service A (17%), Comparison A (15%), and Comparison B (5%). Students at Comparison School B as a group appeared best able to handle the instrument on their own, while the Service School A group appeared least able. (This is an indication of the difference between student groups to begin with). While the test administration staff was fairly sensitive in detecting reading difficulties some students may have refused help because they were embarrassed to be seen being read to. The individualized test administration did, however, allow for "spot" help which was given freely at all schools.

The oral presentation of items themselves went well for the attitude scale but was more difficult for the more involved competence test items. Sub-test 4, Planning (see page 44), was the most difficult to administer orally since the items required a rank-ordering response. The rank-ordering task required the student to remember all three aspects of the sequence as opposed to recognizing as correct one response in the multiple choice items of the other scales.

Help with writing was also given to students. No problems accompanied this procedure. Six of the ten students who received help with writing also received help with reading. Help with writing at the four schools occurred

as follows: Service B (23%), Comparison B (14%), Service A (13%), Comparison A (0).

Students varied in their reactions to the inventory and in their ability and motivation to complete it in the time block allotted for their work. Observations of both the pre and post-testing yielded the judgment that students reacted more positively to the pre-testing than the post-testing. The pre-testing during the Fall of 1975, despite staff-startup problems, appeared to generate more excitement in the students. In all four project schools students showed interest in the uniqueness of the CMI items, and responding to them became somewhat of a challenge. The post-testing in early May of 1976 at the Comparison Schools and late May at the Service Schools was seen as more of a chore by many students. The Post-test inventory competed with other demands upon students such as final exams, a standardized reading test, and Regents exams. The Inventory administration at the Service Schools, delayed until the end of May to maximize length of the counseling program may have been hurt most by the end of year rush of events.

Student variables and test conditions combined to generate differences in ability and willingness to take and complete the inventory. Table 5 lists the number of students attempting and completing the Inventory for the pre- and post-testing at the four project schools.

Table 5

Student Behavior in Taking and Completing the CMI

Behavior	Project Schools							
	Service B		Comparison B		Service A		Comparison A	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Attempted	15	17	21	21	34	30	27	20
Completed	10	16	18	20	20	12	18	15
Percent Completed	66.7	94.2	85.7	95.2	58.8	40.0	66.7	75.0

The overall ability of physically disabled students to take the CMI, a standardized inventory, is judged good. Most students evidenced a high degree of persistence, considering the minimum of three hours required to complete the instrument. In descriptive terms more completions and less resistance can be seen at the "suburban" schools (Service and Comparison B). The greatest resistance during post-testing (when data were tabulated on this matter) came at Service School A. At this school three students attempting the inventory were resistant during its administration and six students who were asked to take it refused outright. This resistance coincided with the greatest disruption at any of the schools owing to an unexpected crash reading test that required postponement of post-testing for four days.

It is clear that a combination of environmental and student variables not related to disabilities can interfere with data collection of this type. However, interference from disability-related factors may have paradoxically been a function of the time given to students to complete the inventory. To some students it may have seemed as if they were working on a task that would never end. It is concluded then, that the CMI (and perhaps other standardized instruments) can be used with disabled students if the test administration is customized as outlined above. However, for some students, customization, especially in relation to the time factor, may lead to a decrease in the validity of the instrument as students become less motivated to complete it. This would suggest the modification, development, and use of assessment instruments of shorter length. With acknowledgment to psychometric problems one possibility would be to use half of CMI items in each scale for the pretest and half for the post-test.

1. Descriptive Data. A description of student performance on the CMI is given in Table 6. CMI scores are given by grade level for students who completed each scale. The percentile (based on published norms) corresponding to the mean CMI score for each scale at each grade level is also given.

Table 6

CMI Scale Scores for All Students by Grade Level for Fall Administration

	Grades			
Scales	9	10	11	12
A1				
M	27.95 (20)	28.12 (13)	29.75 (14)	33.55 (24)
%ile	12	13	14	26
C1				
M	9.7 (18)	10.55 (35)	10.60 (15)	12.8 (20)
%ile	36	35	21	33
C2				
M	11.40 (15)	12.46 (30)	11.77 (13)	14.75 (20)
%ile	40	39	27	42
C3				
M	9.6 (15)	9.4 (26)	9.5 (12)	13.5 (20)
%ile	47	35	26	42
C4				
M	8.93 (14)	10.61 (26)	11.46 (11)	12.82 (17)
%ile	59	53	46	47
C5				
M	6.77 (13)	7.61 (26)	7.4 (10)	9.72 (18)
%ile	54	57	34	48

Note. Numbers in parentheses indicate number of students who completed each scale.

Scales: Attitude (A1), Self-Appraisal (C1), Occupational Information (C2), Goal Selection (C3), Planning (C4), Problem Solving (C5).

Maximum score A1 = 50.0, C1 - C5 = 20.0 each.

Absolute scores on all six CMI scales tend to increase across grade levels. While some reversals take place at the tenth and eleventh grade levels, all ninth grade scores are lower than twelfth grade scores. Descriptively, the CMI scores for these disabled students follow the expected upward trend -- which is the operational definition of increasing career maturity.

Percentile scores across grades for the attitude and competence scales range from 12 to 26, and 21 to 59 respectively. This is taken to indicate a better performance on the competence scales relative to published norms than on the attitude scale. Whether this relationship -- relatively low attitude scale percentile scores and moderate competence percentile scores -- is a pattern peculiar to disabled students needs further investigation. On an individual basis however, counselors could explore the extent to which a student is integrating feelings about work with facts about the working environment.

Percentile scores on some scales, C1 - C5, drop from ninth through eleventh grade and then, (along with A1) jump back up at the twelfth grade level. Whether this represents just a chance occurrence in this small number of students, a dropping out of students who will not graduate, or a "spurt" in development prior to high school graduation warrants further study. In this case again, counselors could explore the extent to which a student is putting off examining a career until the last year of high school. Delays of this kind for the disabled can be disadvantageous because of the lead time needed by sponsoring agencies in arranging for high school placements.

2. Evaluative - comparative data. The mean CMI scale scores for all project schools for both the Fall and Spring administrations appear in Table 7.[20]

Table 7

Mean CMI Scale Scores for Fall and Spring Administrations

	Schools											
Scales	Service A			Comparison A			Service B			Comparison B		
	M	SD	n	M	SD	n	M	SD	n	M	SD	n
A1												
Fall	29.85	(7.74)	34	28.07	(6.88)	27	30.57	(7.35)	14	31.00	(6.13)	21
Spring	30.59	(6.28)	27	29.25	(6.68)	20	28.19	(8.13)	16	32.95	(5.35)	21
C1												
Fall	10.90	(3.47)	29	10.61	(4.62)	23	10.58	(3.90)	12	11.63	(4.25)	19
Spring	9.86	(4.55)	21	10.30	(4.05)	20	9.44	(3.95)	16	11.48	(3.72)	21
C2												
Fall	12.67	(3.75)	27	12.62	(3.87)	21	11.73	(4.29)	11	13.53	(3.76)	19
Spring	12.65	(4.33)	20	12.47	(4.74)	19	11.69	(2.89)	16	14.50	(3.36)	20
C3												
Fall	10.88	(3.92)	24	10.95	(3.28)	21	9.10	(4.38)	10	10.50	(2.64)	18
Spring	9.06	(3.64)	16	11.00	(3.11)	18	8.75	(2.86)	16	11.60	(3.07)	20
C4												
Fall	9.90	(3.94)	21	11.16	(3.67)	19	10.10	(5.26)	10	12.44	(2.73)	18
Spring	9.27	(5.60)	15	11.47	(4.69)	15	10.31	(3.89)	16	12.55	(3.65)	20
C5												
Fall	8.00	(3.83)	20	8.21	(4.13)	19	8.00	(3.16)	10	7.61	(2.75)	18
Spring	8.33	(4.08)	12	8.53	(3.78)	15	7.81	(3.17)	16	7.75	(3.75)	20

Note: Scales: Attitude (A1), Self-Appraisal (C1), Occupational Information (C2), Goal Selection (C3), Planning (C4), Problem Solving (C5).

[20] CMI scores are given for all those students present during the Fall administration and all those present during the Spring administration.

Fall CMI scores at each of the four schools were compared to determine if they differed prior to the start of the counseling program. In this comparison no statistically significant differences were found between any of the four schools for any of the six scales. After the counseling portion of the project ended, the four schools were again compared. It was expected that Service Schools would now score significantly higher on all or parts of the CMI. However, no statistically significant differences in the predicted directions were found between schools.[21]

A combination of reasons can be considered for this finding:

a) The counseling program this year involved a broad range of activities. Perhaps,therefore, there was not enough of a focus on activities related to occupations and careers. As has been noted elsewhere, earlier use was recommended for active and concrete activities such as field trips and speakers. In addition, planned "homework" experiences such as interviewing of local merchants and tradesmen should also receive more attention.

b) The CMI as an instrument may not be sensitive to certain changes which occurred on the part of some students, e.g., becoming aware of a business office for the first time, and finding out a receptionist's job can be done by someone in a wheelchair. An additional assessment procedure to tap these changes may be needed, perhaps an interview based on a series of open-ended questions. A counselor log of critical incidents occurring in the student's vocational domain could also be utilized for this purpose.

c) The methodological problems outlined elsewhere -- a quasi-control group,changing class registration, resistance to testing -- may have confounded the between group statistical comparisons that were made using CMI scores. Attempts to either control for these factors or changing the pre-post control group evaluation design should be undertaken.

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[21] Mean CMI scores for project schools for each scale were compared using a one-way analysis of variance. This procedure was used for the pre-test as well as the post-test.

D. Career Plans.

Students in all four project schools were asked to indicate occupations they were interested in pursuing (up to three) and the reasons for their choices (up to nine). This information was collected in the Fall and then again in the Spring of the project year. Collection of this material was fairly straightforward.

1. Descriptive data. The occupations listed by students were categorized according to Roe's field and level classification system.[22] A typical pattern of occupations for one of the project schools appears in Table 8. At this school some of these occupations were chosen more than once.

A broad range exists in both the field and level of occupational choice. From case study material we know that some of these choices derive from fantasy and others are closer to being realistic. However, the pattern reinforces the notion that disabled high school students think of themselves in terms of varied occupational roles. The actual career projections of seniors, in fact, include plans for training for trades, and college (a few seniors also indicated they will stay home after graduation).

Some patterns that emerge with regard to the least chosen occupational fields -- II, V, and VIII -- are highlighted here. These fields, it is felt, could receive more exposure in systematic presentations of occupational information. Field II -- business contact -- includes occupations that are primarily concerned with the face-to-face sale of merchandise in which personal persuasion is required. This occupational category may have been

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22 Roe, A. The psychology of occupations. New York : Wiley, 1956.

Table 8

Typical Patterns of Occupations Chosen by Students

Field	Social Services	Business Contact	Organization	Technology	Outdoor	Science	General Cultural	Arts and Entertainment
Levels	I	II	III	IV	V	VI	VII	VII
1	Psychologist			Inventor		Psychiatrist		Writer Singer Artist
2	Rehabilitation Therapist Social Worker		Accountant Politician	Architect	Forest Ranger	Nurse	Teacher Lawyer	Musician
3	Camp Counselor Community Worker	Business	Bookkeeper Shopkeeper Secretary	Specialized Technician		Lab Technician		Radio Announcer
4	Child Care Worker Chef Policeman		Secretary Cashier	Comp. Tech. Carpenter Mechanic Electronics				Racing Car Driver Cartoonist Photographer Advertising Artist
5	Mailman Telephone Op. Delivery Boy Taxi Driver Housekeeper Beautician		Clerk	Truck Driver Bus Driver				Arts and Crafts
6	Guard Hospital Attendant							

omitted because these disabled students don't see themselves as being accepted in this role. It may also be that there is a non-business bias among counseling and teaching personnel. Field IV -- outdoor -- was probably not chosen for obvious disability-related reasons, but may also represent a city bias on the part of students. Field VIII -- general cultural -- which includes such occupations as librarian, linguist, and journalist may have received less attention because students from lower socio-economic backgrounds do not consider entering these occupations.

The reasons given by students for their occupational choice were examined (an extensive content analysis was beyond the scope of this project). Generally, most reasons cited by students were intrinsic in nature. That is, students referred in a general way to their own interests, values, and abilities for the occupation chosen. In most cases few extrinsic reasons were cited, e.g., working conditions, salary, co-workers, physical plant, transportation, etc. In general, counselors are usually gratified to find students considering intrinsic factors but a more balanced set of considerations seems preferable, especially in the case of the disabled. This lesser awareness of the actual day-to-day process of work and the work environment was also evidenced by student reactions on field trips.

2. Evaluative - comparative data. For this comparison we assumed that students are more vocationally developed if they can cite a greater number of occupational options (up to a point) and give more reasons for their choices. We do realize, however, that in specific cases a narrowing of choice would be considered a sign of growth. The strategy taken then, in the comparative data analysis, involved examining the number of occupations being considered by students and changes in the reasons given for these choices.

A comparison between the number of occupations chosen by students in the Fall with those chosen in the Spring appears in Table 9. Only data from those students who completed the pre- and post-survey appear in this table.

Table 9

Mean Number of Occupations Chosen in Fall and Spring

	Schools			
Number of Occupations	Service A (n=28)	Comparison A (n=20)	Service B (n=11)	Comparison B (n=18)
Fall				
M	1.96	2.45	2.00	2.44
SD	.88	.76	.89	.78
Spring				
M	2.64	3.00	2.82	2.56
SD	.62	.46	.60	.86
Change				
M	.68	.55	.82	.11

From the Fall to Spring survey the mean number of occupations chosen by students increased in all project schools. However, as would be predicted, the increases were greater at the Service Schools than at the Comparison Schools. A comparison was made of these four net increases but a significant difference was found for only one pair, Service B > Comparison B (a mean increase of .82 occupations considered vs .11).[23]

[23] Change scores were compared using a one-way analysis of variance, $F(3.73) = 4.48$, $P < .01$, followed by Newman - Keuls multiple comparison test, Service B > Comparison B, $P < .05$.

A comparison between the number of reasons given by students for Fall occupational choices and Spring choices was also made (see Table 10). Again, only data for those students who completed the pre- and post-survey were included.

Table 10

Mean Number of Reasons Given for Occupational Choice During Fall and Spring

	Schools			
Number of Reasons	Service A (n=28)	Comparison A (n=20)	Service B (n=11)	Comparison B (n=18)
Fall				
M	2.86	3.30	3.09	4.94
SD	1.65	1.78	2.34	3.08
Spring				
M	3.71	3.80	4.91	5.50
SD	2.07	2.09	3.11	3.09
Change				
M	.86	.50	1.82	.56

The mean number of reasons given for occupations increased at all four project schools between the time of the pre- and post-test. The increases at the Service Schools were greater than at the Comparison Schools as would be predicted. However, no statistically significant difference was found between the four net increases.[24]

The results of the career plans procedure -- asking for occupational choices and reasons for them -- are cautiously taken as supporting the Service School program. In addition, we may also have an indication that a more open-ended evaluation instrument may be more useful in tapping changes in

[24] Change scores were compared using a one-way analysis of variance.

vocational development than a structured inventory like the CMI.

E. Ratings of life space.

Students were asked to evaluate specific elements (concepts) in their environment (life space) in an effort to understand how they subjectively viewed their own circumstances. Eleven concepts were selected for rating which were salient to students and also logically related to counseling goals of career development and personal growth. The eleven concepts which appear below were also interrelated to permit internal comparisons:

a) My goals
b) How I make plans
c) How I make decisions
d) Myself
e) My problems
f) People who are disabled
g) People who are not disabled
h) School
i) My past
j) My present
k) My future

The eleven concepts were incorporated into an instrument known as the Semantic Differential Scale.[25]

This instrument is a seven-point scale bounded by a series of bipolar adjectives. Raters are asked to check a point on the scale that best indicates the degree of positive or negative reaction to the concepts.

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25 Osgood, G.E., Suci, G.J. and Tannenbaum, P.H. The measurement of meaning. Urbana : University of Illinois Press, 1957.

An example of the scale format and one of the concepts (filler adjectives are excluded) is given below:

My Goals

sweet	_____:_____:_____:_____:_____:_____:_____:	sour
bad	_____:_____:_____:_____:_____:_____:_____:	good
high	_____:_____:_____:_____:_____:_____:_____:	low
dirty	_____:_____:_____:_____:_____:_____:_____:	clean
beautiful	_____:_____:_____:_____:_____:_____:_____:	ugly
worthless	_____:_____:_____:_____:_____:_____:_____:	valuable
cowardly	_____:_____:_____:_____:_____:_____:_____:	brave

The same adjective pairs were used for each concept. The adjective pairs themselves represent the unique element in the Semantic Differential in that they are part of the evaluative dimension of the scale. That is, they have been empirically identified (through factor analysis) as being among those adjective pairs whose ratings cluster together to tap the underlying psychological dimension connoting evaluation of or affective reaction to a concept. The good-bad adjective pair can be viewed as most representative of this dimension. All the adjective pairs selected here had high factor loading on this evaluative dimension. Ratings on all the evaluative pairs for each concept can be added together to yield an overall score and/or mean rating.

This instrument was administered to students individually on a pre-post basis. Help was given in the same manner as described with the CMI with time of administration ranging from 15 to 30 minutes. One problem in using the scale with some students involved explaining how ratings were made dimensionally, e.g., from good to bad. In addition, some adjective pairs were not high enough in face validity. That is, for some students, the pairs did not appear to fit the concept rated.

1. Descriptive data. The mean Semantic Differential (SD) ratings for each of the ten life space concepts for the Fall and Spring appears in Table 11. Concepts are listed in abbreviated form. Pre- and post-ratings of each concept were made by the same students.

Almost all mean ratings for concepts are at the positive end of the seven point scale (midpoint=4). Some interesting descriptive observations can be made from these data both in relation to single concepts and in terms of relationships between concepts.

The problems concept relative to the other ten concepts receives the most negative rating. Considering the positive distribution of most other ratings this appears to represent an effort by students to openly acknowledge their disabilities. Perhaps these ratings also indicate a greater willingness than would have been expected to talk about problems with counseling interns.

We were very interested in ratings for the two concepts Non-Disabled-Disabled. The concept non-disabled received a more negative evaluation than the concept disabled in both Fall and Spring. We very tentatively wish to integrate this finding with observations of expressed negative feelings by disabled students toward non-disabled peers. An approach-avoidance incident involving peer relations was observed at one Service School. In this instance, disabled students wanted to set up a counseling group with non-disabled peers but wanted them to come in from another school where the students might be "nicer".

It's obvious that counselors of the disabled must constantly deal with the issues of rejection, anger and even loneliness. One programmatic effort to consider in this regard involves teaching disabled students how to help the non-disabled overcome any initial awkwardness they may experience. While this approach may not seem a "just" solution,

Table 11

Mean Semantic Differential Ratings
for Fall and Spring Administrations

Administrations					
		Fall		Spring	
Concepts	n	M	SD	M	SD
Plans	47	5.60	1.11	5.64	1.04
Decisions	47	5.23	1.15	5.26	1.17
Goals	48	5.70	.85	5.90	.83
Myself	48	5.60	.96	5.89	.95
Problems	47	3.83	.91	3.97	1.25
School	47	4.93	1.31	4.82	1.37
Non disabled	45	5.02	1.01	5.04	.86
Disabled	41	5.12	1.27	5.17	1.08
Past	44	4.77	1.58	4.35	1.52
Present	46	5.47	1.08	5.66	1.09
Future	45	5.60	1.04	5.83	.98

it may be a realistic approach to consider.

The Goals - Plans - Decisions concept received ratings from high to low as they appear below. The same relationship was also observed between concepts for the Spring ratings. This relationship may represent a tendency to feel more positive about citing or thinking about goals than about the process of deciding among goals and moving towards them. While this pattern may not be peculiar to these disabled students it does reinforce our programmatic efforts to emphasize planning and decision making in our career development efforts.

Finally, the Past - Present - Future concepts receive ratings for both survey administrations which increase from past through future, denoting in general an expressed optimistic outlook. Since this collection of concepts hangs together for students, counselors can use them as stimuli for discussing the progression students see themselves making from past to present to future.

2. Evaluative-comparative data. After having students in all four project schools rate concepts on the SD (e.g., myself, my goals, my problems) both before and after the counseling program, we sought to determine if feelings about these life space concepts changed. No pattern of change or differences were found between Service and Comparison Schools.

One explanation for this finding may be that the project in fact did not change feelings of students on these pre-selected concepts. Another explanation might be that the SD is too abstract for some and too obvious for others and therefore, at least for these samples, not effective. Finally, one may ask the broader question: since it is so difficult to measure changes in feelings resulting from counseling, perhaps it would be a more effective evaluative strategy to measure the kinds of changes in behavior that one might expect would follow changes in feelings.

F. Teacher Ratings of Students.

Teachers who taught students outside of the special education homeroom class (essentially subject area teachers) were surveyed as to students' performance in their classrooms. The focus of the survey was not to determine achievement(e.g., grades) but to determine to what extent students exhibited certain behaviors characteristic of effective and motivated students. Ratings of students in relation to the following eight items were made by teachers, on a five point scale (1=rarely, 3=sometimes, 5=frequently):

1. Pays attention in class.
2. Participates in class discussions without being called on.
3. Takes notes in class or makes arrangements for notes to be taken.
4. Attempts homework assignments.
5. Studies material in preparation for tests.
6. Participates in special class or group projects.
7. Remains after class to ask questions, clarify assignments, etc.
8. When expected to, works independently on assignments or projects.

In all four project schools ratings were made by the students' Fall semester teachers and then again by their Spring semester teachers. On the average four teachers rated each student each semester.

1. Descriptive data. Among all four project schools there was a total of 75 students who were rated both in the Fall and Spring on all eight items. The mean ratings received for this combined pool for each rating category (item) appears in Table 12. Item means have been rank-ordered in the table from those having the highest ratings to those having the lowest ratings.

Table 12

Mean Teacher Ratings of Students
in Spring and Fall Surveys

	Items							
Ratings	1	4	3	5	8	6	2	7
Fall								
M	4.34	3.93	3.90	3.76	3.61	3.19	2.89	2.51
SD	.59	1.03	.91	.94	.97	1.17	1.14	1.09
Spring								
M	4.26	3.82	3.81	3.63	3.55	3.40	3.23	2.62
SD	.71	1.11	1.06	1.12	1.13	1.04	1.10	1.02

It is clear that handicapped students are rated positively by regular classroom teachers for most items (mid-point=3). However, a significant difference was found between item means, indicating that teachers judged some behaviors as occurring more frequently than others. This difference in frequency of rated behavior occurred in the Fall as well as in the Spring.[26] For example, in the Fall the mean rating for -- pays attention in class -- was 4.34 while the mean rating for -- participates in class discussions -- was 2.89. Some mean ratings for items were fairly close together indicating that,overall, teachers did not see a difference in the occurrence of these behaviors (see items 3 and 4, Table 12). It was found in fact that the eight item means clustered together to form three main groups representing common behavior underlying items.[27]

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[26] Fall ratings: one-way analysis of variance with repeated measures over 8 items, F (7,518) = 47.60, $p < .001$.

Spring ratings: one-way analysis of variance with repeated measures over 8 items, F (7,518) = 46.45, $p < .001$.

[27] A Newman-Keuls multiple comparisons test was done between means of all eight items as a result of which the clustering effect was observed. Multiple comparisons were carried out separately for Fall and Spring ratings. The specific relationships between pairs of items can be found in the Appendix.

The clustering is illustrated as follows:

For the Fall survey the highest rating was for the following items:

Item 1 - Pays attention in class.

The next highest ratings were for four items that seem to have in common engaging in individual work:

a) Item 4 - Attempts homework assignments.

b) Item 3 - Takes notes in class or arranges for notes to be taken.

c) Item 5 - Studies material in preparation for tests.

d) Item 8 - When expected works independently on assignments.

The lowest relative ratings were for the following three items that have to do with participation:

a) Item 6 - Participates in special class or group projects.

b) Item 2 - Participates in class discussions without being called on.

c) Item 7 - Remains after class to ask questions, clarify assignments, etc.

For the Spring survey essentially the same clustering emerged (see footnote 27); the rank-order in item means was the same as in the Fall survey (see Table 12).

The three clusters -- paying attention, engaging in individual work, and participating -- would appear to represent a passive-active interaction dimension. These students thus appear to receive lower relative teacher ratings in those areas that involve greater interaction or communication.

In some cases we know that time pressures miligate against interaction. Few after-class discussions occur with teachers because many students need the time to get to class or are being helped and escorted out of the room. Counselors, perhaps, could explore with teachers whether there may be ways, other than immediately after class, to have informal

contacts with disabled students. Some direct observations could also be made as to whether or not disabled students become more subdued in the presence of non-disabled peers. In addition, counselors could explore what teachers do to encourage classroom participation, as well as the extent to which these students are allowed to sit quietly and "pay attention" because their participation makes teachers and students uncomfortable.

2. Evaluative - comparative data. Teacher ratings for students who received ratings at each of the four project schools for the Fall (pre) and Spring (post) survey appear in Table 13.

Fluctuations between pre-and post-ratings and differences between schools can be observed; however, item 2 -- participates in class discussions without being called on -- is the only rating category where statistically significant differences were found. Over the course of the program year, teachers rated classroom participation as increasing in all four project schools, with the greatest increase occurring in Service School B.[28] The predicted relationship between the four Spring ratings for the project schools was, Service A> Comparison A, and Service B > than Comparison B. However, it was actually found that students from Service School B were rated as participating in class more than in Service School A.[29]

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[28] All ratings for item 2 increased over the ocurse of the year, but only the increase for Service School B was significant, correlated $t(13) = 2.46$, $p < .05$, two-tailed.

[29] For the Fall ratings, no significant differences were observed between means for the four project schools on item 2, $F(3,75) = 1.10$, $p < .05$. For the Spring ratings, differences between item 2 means were found to be significant $F(3,75)=3.11$, $p < .05$. While the means of Service School B and Comparison School B were in the predicted direction (Service> Comparison), a Newman-Keuls multiple comparison test only found a significant difference between the means of Service School A and Service School B. ($p < .05$).

Table 13

Spring and Fall Teacher Ratings of Students by School

Items	Schools							
	Service A		Comparison A		Service B		Comparison B	
	M	SD	M	SD	M	SD	M	SD
1								
Fall	4.23	(.62)	4.27	(.52)	4.48	(.38)	4.43	(.67)
Spring	3.94	(.95)	4.43	(.52)	4.33	(.63)	4.41	(.53)
2								
Fall	2.65	(1.23)	2.94	(.96)	3.11	(1.17)	2.94	(1.23)
Spring	2.74	(1.13)	3.23	(1.07)	3.75	(.75)	3.35	(1.29)
3								
Fall	3.77	(1.02)	3.76	(.81)	3.96	(.84)	4.14	(.93)
Spring	3.47	(1.17)	3.94	(.87)	3.89	(1.08)	4.00	(1.09)
4								
Fall	3.70	(.97)	3.66	(1.16)	4.18	(.90)	4.18	(.98)
Spring	3.44	(1.23)	3.89	(.93)	4.18	(.91)	3.93	(1.21)
5								
Fall	3.53	(.81)	3.54	(1.20)	4.09	(.80)	4.00	(.83)
Spring	3.35	(1.30)	3.60	(.99)	3.97	(.90)	3.74	(1.17)
6								
Fall	2.65	(1.25)	3.19	(.82)	3.84	(.74)	3.33	(1.37)
Spring	3.04	(1.14)	3.49	(.96)	3.60	(.73)	3.56	(1.15)
7								
Fall	2.41	(1.06)	2.13	(.73)	3.22	(1.10)	2.50	(1.25)
Spring	2.42	(1.07)	2.73	(.97)	3.27	(1.01)	2.28	(.86)
8								
Fall	3.39	(.86)	3.53	(.79)	3.92	(.97)	3.71	(1.01)
Spring	3.32	(1.16)	3.60	(1.16)	3.78	(.97)	3.60	(.99)

Note. The number of students who received pre and post ratings for all eight items were as follows: Service A (n =22), Comparison A (n =19), Service B (n=14), Comparison B (n=20).

The unexpected difference observed between Service School B and Service School A on ratings of classroom participation (item 2) may be related to differences in program emphasis at these schools. As reported earlier in this report, Service School B developed a more intensive group counseling program and placed a greater emphasis on developing questioning skills for field trips. Emphasis on interaction and communication (behaviors) in these two activities may have been related to the increase in rated classroom participation at Service School B.

In general, the findings of both the descriptive and comparative data analysis would appear to have both program and research/evaluation implications regarding communication and participation. First, after exploring this matter, counselors could work with both disabled students and mainstreamed teachers to increase classroom participation and interaction in other "normal" environments perhaps by conducting integrated counseling groups. Second, the project staff could investigate participation and communication patterns in detail -- 1) by including specific rating categories on the teacher survey related to classroom and peer interaction, 2) by asking for peer ratings (from disabled and non-disabled), and 3) by including baseline measures on the interaction rates of non-disabled students. All this survey information could also be used in a programmatic fashion by utilizing a survey feedback technique to acquaint teachers and students with their patterns of interaction.

VI. Conclusion

The year's experience in this project produced a wealth of data, more in fact than it was feasible to analyze completely for purposes of this report. The main value of all these descriptive and comparative data has been to provide a stronger base than we previously had for planning a program of interventions and service for these students of kinds that, to the best of our knowledge, were not to be found elsewhere.

For example, there is within this report the first information we have found about career maturity characteristics of physically disabled high school students. In this case, there are available national data on non-disabled students to use as baselines for purposes of comparison. In other instances, as with the ratings of the students by their classroom teachers, we found ourselves without baseline data for these same teachers or for teachers in similar schools. In this case, we must in future collect our own baseline data.

Over and above the quantitative data reported here we learned a great deal in non-quantitative ways. We learned that most of our assessment devices and most of our helping interventions had to be modified in order to be useful with these students. To some extent this was because of physical difficulties in writing and speaking. To some extent it was because of difficulties in reading and understanding, both of which may have been related to socio-economic-family factors in addition to the physical factors. And to some extent modifications were necessary because of affective factors in the students, such as a reluctance to self-reveal or criticize others in a group session, or simply fear of trying something new, which itself may be traceable to the effects of the physical disability.

We learned also that a group of counseling interns could move within a few months from a fear of working with physically disabled people to the point where they frequently forgot, for long periods of time, that their clients were indeed physically disabled. The major change in these attitudes occurred after beginning to work at the schools, but quite a lot was accomplished by use of closed circuit television and conferences with consultants who are either themselves disabled or are experienced in working with disabled people.

We also learned something about the transferability, to other kinds of handicapped clients, of the counseling skills and attitudes developed in working with those with physical disabilities. This awareness developed serendipitously as a result of the request that we include some learning-disabled students in counseling groups at one of the schools. This happened to suit our needs too, because we needed more students in order to bring some of the groups up to adequate size at certain periods in the school day. Not only did the mixed groups work well, but the interns found that they could relate rather quickly to the learning-disabled students.

We were gratified to learn what so many have learned before, that even in large inner-city schools one finds many able and committed staff members who welcome those, like our interns, who came to offer new services. Often, the added services proved to be burdensome for the special education staff and administration of the schools because of the crowded schedules and the lack of appropriate space. Despite all the obstacles we found ourselves among friendly colleagues and with many opportunities to work with students, staff, and others.

On the whole, we conclude that our training model and our service model were both validated by the year's experience. Selected advanced graduate students of counseling can in a relatively short time become ready to apply their knowledge, understanding, and skills to a physically disabled clientele in a special education school program. These particular interns had received their previous graduate training in a program that emphasized outreach and developmental guidance. That kind of activist, cognitively oriented counselor seems to be very appropriate for this type of setting. We have much to do yet by way of developing and evaluating methods and materials, but we believe the year's experience shows that we are mostly on the right track.

APPENDIX

APPENDIX A

MATERIALS ACQUIRED AND DISSEMINATED BY OCP PROJECT

1. Materials about specific disabilities.

Aphasia: Understanding Aphasia -- A Guide for Family and Friends.
(Available from the Institute of Rehabilitation Medicine, 400 East 34th St., New York, N.Y. 10016)

Cerebral Palsy: Skills in Living...Toward a Richer Tomorrow, for Adults and Teenagers with Cerebral Palsy
How To's on Dressing & Feeding
My Baby is Slow
Guiding the Family of the Handicapped Child
Checking Out Facilities for Care
Do's and Don'ts for the Most Important 9 Months in Life
A brief bibliography
1974 Annual Report, United Cerebral Palsy -- Our Twenty-fifth Year
(All available from United Cerebral Palsy Associations, Inc., 66 East 34th Street, New York, N.Y. 10016)

Epilepsy: Recognition and First Aid for Those with Epilepsy -- Guidelines for Those Who Meet the Public
Past, Present and Future Research into the Epilepsies
Pharmacopoeia of the Epilepsies
Answers to the Most Frequent Questions People Ask About Epilepsy
An Inside Look...at One of America's Most Serious Health Problems
Because You Are My Friend
Teacher Tips About the Epilepsies
Epilepsia -- Esperanza en la Investigacion
A pamphlet describing the services of the Epilepsy Foundation of America
(All available from The Greater New York Chapter, Epilepsy Foundation of America, 225 Park Avenue South, New York, N.Y. 10003

Muscular Dystrophy: Patient and Community Services
Milestones in Muscle Disease Research
MDA News, February-March, 1975
National Youth Newsletter, April 23, 1976
Around the Clock Aids for the Child with Muscular Dystrophy
The CPK Test for the Detection of Female Carriers of Duchenne Muscular Dystrophy
ALS: Amyotrophic Lateral Sclerosis (two different booklets)
A series of fact sheets on Muscular Dystrophy, Friedreich's Ataxia, Myasthenia Gravis, Myotonic Dystrophy, Adult Progressive Spinal Muscular Atrophy, Werdnig-Hoffmann Disease or Infantile Progressive Spinal Muscular Atrophy, Benign Congenital Hypotonia, Kugelberg-Welander Disease or Juvenile Progressive Spinal Muscular Atrophy
1975 Annual Report, Muscular Dystrophy Association
(All available from the Muscular Dystrophy Association, 157 West 57th Street, New York, N.Y. 10019

MATERIALS ACQUIRED AND DISSEMINATED BY OCP PROJECT (cont'd.)

Multiple Sclerosis; The Enemy of Young Adults and a list of publications. (Available from the National Multiple Sclerosis Society, 257 Park Avenue South, New York, N.Y. 10010

Spina Bifida: The Child With Spina Bifida (Available from the Institute of Rehabilitation Medicine, 400 East 34th St., New York, N.Y. 10016)

2. Directories, Handbooks, and Bibliographies

Directory of Services of the Division of Special Education and Pupil Personnel Services of the Board of Education of the City of New York, January 1975

Services and Facilities Available to Disabled Students at Two and Four-Year Colleges of the City University of New York

City University of New York, A Guide to Admissions/1976

Manual describing the Computer Based Educational Opportunity Center of the City University of New York

Training and Educational Opportunities in New York City for the Physically Disabled. Published by the Computer Based Educational Opportunity Center of the CUNY Office of Admission Services, February, 1976

Student Handbook for Disabled Students at Staten Island Community College, 1975-1976

Occupational Outlook Handbook, 1976-1977, U.S. Department of Labor.

For Parents...A Guide to Educational Services for Handicapped Children in New York State (Available from the State Education Department, Office for Education of Children with Handicapping Conditions, Albany, New York

List of pamphlets and books which deal with the disabled which are available at the ICD Library

Bibliography of materials relating to the handicapped available from the United States Government Printing Office

Business and Community Resources Available to New York City Schools. (Available from Open Doors, 20 West 40th Street, New York, N.Y. 10018)

MATERIALS ACQUIRED AND DISSEMINATED BY OCP PROJECT (cont'd.)

3. Miscellaneous articles, brochures and reports

What is J.O.B. and What Does It Do
Sample Issue of J.O.B. Aids -- A Selection of Qualified Disabled Job Applicants Compiled by the Staff of Just One Break, Inc.
Diagnosis: Drop-out, Unskilled, Physically disabled, Prognosis: Excellent
J.O.B. Rallies to the Needs of Cancer-Cured Clients
What Do They Do for a Living?
25,000 New Yorkers Per Year Become Disabled
(All available from Just One Break, Inc. (JOB), 373 Park Avenue South, New York, N.Y. 10016)

If You Become Disabled (Social Security Administration)
Basic Education Rights for the Handicapped, the 1973 Annual Report of the National Advisory Committee on Handicapped Children
First Class Citizenship for Handicapped People, the 1974 Annual Report of the National Advisory Committee of the Handicapped
Jobs for Veterans With Disabilities (U.S. Department of Labor Manpower Administration)
Unemployment and Disability, An Econometric Analysis with Time Series Data (Social Security Administration)
A Handicapped Child in Your Home (Office of Child Development, HEW)
Feeding the Child With a Handicap (Maternal and Child Health Service, HEW)
Action Against Mental Disability -- The Report of the President's Task Force on the Mentally Handicapped, September 1970
Citizen Advocacy for the Handicapped, Impaired and Disadvantaged: An Overview (HEW)
A National Effort for the Physically Handicapped -- The Report of the President's Task Force on the Physically Handicapped, July 1970
Handbook of Selective Placement in Federal Civil Service Employment of the Physically Handicapped, the Mentally Restored, the Mentally Retarded, the Rehabilitated Offender, April 1975 (U.S. Civil Service Commission)
(All available from Assistant Public Printer (Superintendent of Documents), Government Printing Office, Washington, D. C. 20402)

Articles:
Human Sexuality and the Handicapped, March 1975 issue of Personnel and Guidance Journal
They Are Police Technicians, January, 1976 issue of Worklife
The Handicapped -- Their Families Need Help Too, February 1975 issue of Psychology Today
To Place the Unplaceable, Nov.-Dec., 1971 issue of Journal of Rehabilitation
The Vocational Potential of the Quadriplegic, May 1969 issue of Medical Clinics of North America
Assessing the Handicapped for Rehabilitation, V.20, No. 10, Contemporary Psychology, 1975

Newspaper clippings file

MATERIALS ACQUIRED AND DISSEMINATED BY OCP PROJECT (cont'd)

Learning in New York -- Special issue on "Handicapped at the Crossroads", Vol. 4, No. 3, February 1976. (Available from Learning in New York, Office of Public Affairs, Room 1214, 110 Livingston Street, Brooklyn, New York 11201
Barrier-Free Design -- Accessibility for the Handicapped (IRDOE)
Report -- Responding to the Needs of the Handicapped--Two Year College Strategies Workshop, 1974 (IRDOE)
Report -- Implementation of Strategies for the Education of the Handicapped at Community Colleges, September, 1975 (IRDOE)
(The above IRDOE reports available from the Institute for Research and Development in Occupational Education, Graduate School of the City University of New York, 33 West 42nd Street, New York, N. Y. 10036)

4. Counselor's professional tools

Glossary of Medical Terms
Anne Roe's Occupational Classification System
Brochures describing the services of ICD Rehabilitation and Research Center, including the Tower System for vocational evaluation
(Available from ICD Rehabilitation and Research Center, 340 East 24th Street, New York, N.Y. 10010)
Deciding, a course of study to teach students how to make decisions
(Available from College Board Publication Orders, Box 2815, Princeton, New Jersey 08540)
Reprints of "The Career Education Class Field Trip", "Classroom Guest Speakers", and "Questions Generally of Interest to Students"
(From "How-To" Series of the State Project to Implement Career Education, SPICE)
Counseling Case Management, Series II of the Guidance Monograph Series, 1968.

5. Audio-visual materials

Filmstrip -- Careers and Lifestyles (Available from Guidance Associates, 757 Third Avenue, New York, N.Y.

Lists of films, videotapes, filmstrips, cassettes and bibliographies of audio-visual materials dealing with career development, employment, and counseling of disabled individuals and their families.

(Names of schools and participants have been deleted in accordance with Board of Education guidelines.)

L I N K : A NEWSLETTER FOR PARENTS

Service School A

Published by the Institute for Research & Development in Occupational Education, Center for Advanced Study in Education, Graduate School & University Center, CUNY, under the State Education Dept., Div. of Occupational Education Supervision, Grant # VEA 76-48-671.

Vol. I, No. 1 March 15, 1976

GETTING TO KNOW YOU

In October of 1975 we at the City University of New York started a special occupational counseling program for physically handicapped students at Service School A *We are now starting a newsletter for you, the parents of these students, to bring you up-to-date on the many activities of the counselors, teachers, and students at the school. They will be writing their own messages to you.*

We welcome your comments and suggestions.

FROM YOUR CHILD'S TEACHERS

(Name of Teacher)

"WE SHOULD TRY TO MAKE IT possible for any children under our control if they want to, to go more places, know more people, make more choices, do more things--in short, to free them more and more from their dependence on us."

This sentence caught my eye in a book I read recently (John Holts's Escape from Childhood) and seemed to include some important ideas for all mothers and fathers, and perhaps should apply even more to parents of physically handicapped teenagers.

A few ways to encourage independence might be:

...a brief visit (week or weekend) to the home of a friend or relative;
...spending time at a summer camp;
...travel training for public transportation, for example, reading maps, making change, and asking for directions;
...learning how to drive specially equipped cars;
...housekeeping and cooking "privileges" at home.

A small tree cannot survive long in the shade of a large tree. The younger one must have its own sun and water. So our children must be allowed distance and freedom from us to grow and become as self-reliant as possible.

(Name of Teacher)

Are you aware of the many services provided for your child by city, state, and federal agencies? These include educational, health, and transportation services, as well as career counseling and vocational training and placement. Following are examples of some of these services:

...two special home room teachers who plan, guide and assist handicapped students in many academic and personal matters;
...a reading expert 3 times a week;
...a speech improvement teacher weekly;
...two Health Department aides (male and female);
...a physical therapist once a week;
...bussing the children on special buses;
...driver's instruction for handicapped students (individual and group lessons) twice a week;
...counselors from the Graduate School of the City University of New York who guide our students in career choices, and get along beautifully with our students.

In addition, the N.Y. State Office of Vocational Rehabilitation (OVR) helps with college or technical school tuition, transportation and other services for our graduates, as well as vocational training, and tries to make sure that each graduate is properly placed.

We will continue to look for new ideas and methods to improve your child's education. Will you help us, and your child in doing your share at home?

Some of my suggestions will appear in the next newsletter.

IMPORTANT DATES

Wednesday, March 31 6:30-9:00 p.m.	-- Open School Evening
Friday, April 2 12:40-2:40 p.m.	-- Open School Afternoon
April 12-14	-- Midterm Exams
April 15-23	-- Spring Recess

(Note: This is one copy of three different issues that were published for Service School A.)

FOR YOUR INFORMATION

The following is reprinted from the New York Daily News:

Q. My child is disabled but I can't get social security for him because I am not old enough to draw social security benefits. Are there any other benefits that social security can give him? BG

A. If you're the parent of a blind or disabled child, you should know about Supplemental Security Income. These payments are being made to handicapped children, depending on what the parents' income and resources are. If you think your child may be eligible for these checks, you should get in touch with any social security office.

FROM YOUR CHILD'S COUNSELORS

Doris Kemp, Lynne Rosenthal, and Mareleyn Schneider:

We are three recent graduates of a City University Guidance and Counseling program who help your children in making personal and career plans. Some things we do are:

...meet individually and in groups to talk about jobs, colleges, financial aid, study skills, and how to get along with other students;

...provide information about different kinds of occupations; and

...arrange for visits to the schools by disabled employed individuals and employers to help students understand different ways to get jobs and what kinds of training or education they will need.

Want to talk? We can be reached at Leave your name and number and we will return your call.

A SHARED FEELING

I am wheelchair bound and plan to go to college. I'd like to know if I can get an aide to bring me around the city when I have to go somewhere, for example, to an appointment. My family members have their own lives to live and I'd like to be independent of them.

L I N K is a newsletter for parents of physically handicapped students at School. Published by the Institute for Research and Development in Occupational Education, CUNY; 1411 Broadway, New York, NY. 10018; Tel: (212) 354-2271.
Project Directors: Dr. Leo Goldman and Dr. Bert Flugman
Editor/coordinator: Roslyn Fisher
Assistant editor: Olivia G. Schweitzer

FROM YOUR CHILDREN

To Whom It May Concern:

I just want to say that I know it's hard for you to understand me. I want to go to college and be my own person. I just want to be an independent person. I want to have a life of my own. Please try to understand my needs and let me go.

A student

****

To the Parents:

This letter is to advise parents that have a disabled child. I would like to let you know from my experience that I think you are giving too much love to your disabled child when they don't need it.

Another thing--you keep your child away from non-handicapped persons without knowing that in the future your child will feel bad when he goes out to look for a job or when he has to start living on his own. Please make the future of your child easier by giving him more freedom in the outside world.

A nineteen year old handicapped student

****

An Open Letter to My Mother:

The other day we were talking about my going away to college and you told me that whatever I do, not to change my feelings like los Americanos, who go away to college and forget about the home they came from.

Mommy, I just want to say that if I go to college, I would be more independent for my own sake but I promise I will always remember where I came from, who my people are and to never change my feelings for the family. I love you all, but let me be me.

****

NEXT ISSUE

Look for news about students who have graduated and are now working.

(Names of school and participants have been deleted in accordance with Board of Education guidelines.) -80-

L I N K : A NEWSLETTER FOR PARENTS

Service School B

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FROM YOUR EDITOR

This newsletter is written for you, the parents or guardians of physically disabled students at Service School B We want to include information that you will find useful. Do you want articles about the services of the physical therapist, the OVR counselor and others who provide services for your children? Would you like more information about laws relating to disabled individuals? What do you think we should include? Call me at 354-2263 to talk about it, or discuss it with your child and ask him or her to pass the information on to Fran Dillon or Alan Weisner, their counselors. We look forward to hearing from you.

FROM YOUR CHILD'S TEACHERS

(Name of Speech Improvement Teacher)

"Bob, you goin' to speech to learn how to talk?" No, Bob is not going to speech to learn how to talk. He already knows how to talk. He attends the speech and language program at to learn to IMPROVE his speech and language skills.

Students enrolled in this program learn to produce correct sounds, use correct grammar, speak at a proper speed and to control the sound and volume of their voice. They are usually seen individually, twice a week. Homework sheets, covering what we are currently working on, are given to students each week and should be practiced 5-10 minutes every day.

Please feel free to write for an appointment if you have any further questions. I am at on Tuesdays and Wednesdays.

(Name of HC Teacher)

I welcome using this newsletter to answer questions you ark.

One parent of a graduating senior wanted to know about the differences in diplomas. All graduates of New York City public high schools are awarded similar diplomas--there are no longer distinctions designating students as academic or commercial. Although the requirements for the diploma allow great variet in individual programs, they are also set up to insure standards of achievement. A special seal is put on the diploma if the student has successfully passed Regents Examinations in three subject areas.

Another parent asked about subjects offered by various departments. Please refer to the Student Guide which is issued to all students. In addition to information about subjects offered and graduation requirements, it will help you understanc the workings of our school.

Also, may I suggest that you join our PTA? Through active involvement, you will gain greater awareness of problems and advances in education. I look forward to seeing you at future PTA meetings.

FOR YOUR INFORMATION -- WORKING PAPERS

The following is reprinted from New York Magazine:

New York State law requires that anyone under eighteen must have working papers in order to work. Exceptions are baby sitters, golf caddies, teens working part-time in a private home (such as in the yard or as a mother's helper), and those employed by non-profit organizations. Working papers (which are good for two years) can be obtained at public high schools (if the applicant is a student) or, until July 16, at Borough Employment Certification Centers; call 566-7082 for addresses and hours.

Take with you proof of birth, social security number, a consent letter from a parent or guardian, and a note from a doctor stating that you are in good physical condition (free exams are available at borough offices).

NOTE: Students who already have working papers should make sure they will still be valid for this summer.

If the pupil's disability will require other than general working papers, please call the Placement and Referral Center for Handicapped Students of the New York City Board of Education, 624-0854.

NEXT ISSUE

We are planning one more issue for this year. Look for news about students who have graduated and are now working; an article by driver education teacher; and information about wheelchair bowling.

WORKING PAPERS (continued)

(Note: This is one copy of three different issues that were published for Service School B.)

FOR YOUR INFORMATION -- DENTAL TREATMENT

New York University offers dental treatment to disabled children in its Dept. of Children's Dentistry (Pedodontics) and its Special Care Clinic where anyone in a wheelchair will be treated. All routine treatment is performed at the NYU Dental Center at 421 First Avenue. Medicaid covers most routine dental treatment and transportation for some cases. There are reasonable fees for those who do not have medicaid.

Clinic hours are Monday through Friday, 9-11 a.m. and 1-3 p.m. For more information or an appointment contact: Ms. Sue Ortner, 598-3608 or 598-7023.

(This is one of several places which provide dental treatment to physically disabled children. Information about others will appear in future issues.)

FROM YOUR CHILD'S CUNY COUNSELORS Fran Dillon and Alan Weisner:

In our first issue we mentioned that we help your children in making personal and career plans through group meetings. We meet one period a week. Your children have discussed their summer plans, feelings about school and other current interests. We feel that we all benefit by (1) understanding each other and ourselves better, especially our strengths; (2) having a place to express ourselves to others and (3) recognizing that our concerns are similar to others in the group and that we are not alone.

In deciding what to do in the future, it is important that students be exposed to people from different fields of work. On April 28 Mr. Jason Lopez, personnel management specialist of the U.S. Civil Service Commission, spoke to the students about the availability and requirements of federal government positions for disabled persons. Students asked many questions and were very attentive during the discussion.

Field trips to the Xerox Corporation and WTFM radio station are planned for the near future so students can see what people actually do at work.

Please call if you would like to talk to us. Leave your name and number and we will call you back.

IMPORTANT DATES

Trip to Xerox Corp.	May 27
Trip to WTFM, Fresh Meadows	June 3
School closed for Anniversary Day	June 10
Last day of HC classes	June 16
Final Exams	June 11-16
Regents exams	June 17-22
Graduation	June 24

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FROM YOUR CHILDREN

A NEW WAY

Wretched are those who are evil
For they do some things that are not legal.
Love is caring, sharing and not one bit daring,
Being kind is giving and forgiving.
Lost are those who cannot find their way
Love is within the heart
Which those two have
Embracing are they for they have found a new way.

****

LET ME BE AS I AM

Let me be as I am
Not as a butterfly
Not as a bee
But me, simple and free.

****

MIXED FEELINGS

Now that my senior year has arrived, I have mixed feelings about leaving. I made a lot of friends here and I dread the thought of leaving them.

Who knows what the next few years will bring for us seniors? But we do know that our three years at have been a big factor in our lives.

We can only look back and remember our friends and teachers, and look forward to an exciting but sometimes scary future!

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I can write lyrics to a poem or a song,
and say what I feel,
But I can't give it music to make it real.

I can write about basketball or rock and roll,
But a lot of my feelings are still locked in my soul.

Appendix C

Counselor Guide for Student Information Form

STUDENT INFORMATION

Date_____

School:_____ Counseling Intern(s):_____

Student Name:_____Date of Birth:_____Sex:____

As of 10/1/75, Age:____Grade Level:___Class#___Languages spoken:_____

(1) Disability:

(a) Description of the student.

Where appropriate, note functional limitations, e.g., wheelchair, crutches and braces, limited upper extremities, limited lower extremities, speech.

(2) Agency Affiliations:

(a) Past agency relationships including names of physicians, social workers, and OVR counselors.

(b) Present agency relationships, (same as a).

(c) Services received within school e.g., speech therapy. Include names.

Note. A blank form providing space for the recording of information accompanies this guide.

(3) School History and Performance:

(a) Sketch of high school record to date. Include courses, grades, attendance. (copy of the official school record may be attached).

(4) School Performance: (For all tests give name and date administered)

(a) Reading: Include test scores, administration dates, interpretations and comments.

(b) Math score: (same as a).

(c) Other tests: (same as a).

(d) Academic observations (anecdotal material based on observations and conversations with student or teacher).

(5) Interests: (Based on counseling interactions and vocational testing).

Avocational

(a) How does student spend spare time?
(b) Whom does student spend spare time with?
(c) What are interests of students?
(d) What are hobbies of student?

School

(a) How does student like school?
(b) What subjects are liked most?
(c) What subjects are liked least?

Vocational

(a) Has student ever worked? Type of Job(s). Tasks.
(b) What was liked/disliked about work?
(c) What type of job or career is the student planning for?
(d) What are the student's plans for reaching his/her goal?

Current vocational programs, e.g., paramedical (outline specific tasks engaged in).

(6) Family:

(a) Whom is student living with?
(b) What are the occupations of family members?
(c) What are parental expectations for the student's future? (Q. What do your parents want you to do?).
(d) What are home responsibilities, e.g., cooking, errands, cleaning?

(7) Other significant information, e.g., travel training, newsletter contributions, driver education.

(8) Individual Interviews: Number of formal sessions ___Informal Interactions___

(a) Summary of content (themes) and process.

(9) Group: Number of sessions participated in _____

(a) Types of group participated in.

(b) Content material covered in group.

(c) Interaction pattern in groups, e.g., roles, feelings expressed, reaction to group situation.

(d) Recommendations for groups, e.g., type of group and interaction role to be encouraged.

Summary and Recommendations:

(a) Overall counseling goals -- what were you (and student) trying to accomplish?

(b) Significant counselor action taken on entire case, e.g., social worker contact, career plans, OVR contacts, etc.

(c) Specific recommendation for follow-up and counseling.

Appendix D

The Results of Newman-Keuls Multiple Comparisons Test Between Pairs of Mean Teacher Ratings

The results of Newman-Keuls multiple comparisons test between pairs of item means is outlines below.

Fall ratings:

Item 1> than all other items at .01 level.

Item 4> items 7,2,6 at .01 level and item 8 (close up) at .05 level.

Item 3> items 7,2,6 at .01 level.

Item 5> items 7,2,6 at .01 level

Item 8> items 7,2,6 at .01 level

Item 6> item 7 at .01 level and item 2 at .05 level.

Item 2> item 7 at .01 level.

Spring ratings:

Item 1> than all other items at .01 level.

Item 4> items 7,2,6 at .01 level and item 8 at .05 level.

Item 3> items 7,2,6 at .01 level and item 8 at .05 level

Item 5> items 7,2 at .01 level.

Item 8> items 7,2 at .01 level.

Item 6> item 7 at .01 level.

Item 2> item 7 at .01 level.

END